T3 Presents

GUIDE TO Android

{FROM NOVICE TO EXPERT}

MASTER YOUR ANDROID DEVICES

- Essential Jelly Bean guide
- How to buy the perfect budget tablet
- Get all the latest features today
- Protect your phone from thieves

COMPLETE GUIDE

MOVIE PLAYERS

SIT BACK AND ENJOY AMAZING FILMS

MUST-READ GUIDE

ALL DAY BATTERY

WE REVEAL 10 TIPS THAT REALLY WORK

75 PAGES OF ESSENTIAL TIPS AND TRICKS

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T3 Presents

GUIDE TO Android

EDITOR'S LETTER

Welcome to the third instalment of *T3 Presents: Guide to Android*, the most comprehensive compendium of ways to get more from your devices on the market. We keep up with the cutting-edge developments of Android, from the latest updates to the operating system and innovative features, to the brand new devices that are being released at a ferocious pace.

There are so many fantastic devices coming out that we've nearly doubled our number of reviews, to make sure you get a comprehensive overview. The quality of Android devices has sky-rocketed over the last few months thanks to a slew of new Nexus devices hitting the stores. These are Google-endorsed tablets and phones made in partnership with leading manufacturers such as LG and Asus, and they are among the most powerful devices out there.

This issue you'll find reviews of 32 new Android devices, including the stunning Google Nexus 4 and Nexus 10, the brand new smartphone and tablet, which have shaken up the whole market.

Last issue – which is, incidentally, available to buy digitally from Zinio on your Android device – we focussed on doing cool stuff with your Android devices using a host of apps. This time around we're taking a slightly different tack, and showing you how powerful a range of Google's official apps can be.

If you're fed up with iOS fans harping on about voice control and other such features, fume no more! We show you how to use Google Now, which brings fantastic voice automation to Android, as well as Google Currents and new features in Google Maps. The latter has a bunch of improvements that really confirm its status as the best mapping and HPS experience out there, so don't let any iOS fans forget that as they struggle with Apple Maps.

Of course, the whole smartphone and tablet experience is nothing without amazing apps, so we've gone to town to make sure you can kit your device out with the latest and greatest downloads. We've delved into the T3 App Charts and found the top 50 games and the 100 best rated apps, as judged by our expert teams. If you want to find the most addictive button bashers, or the most reliable app for navigating your way home, don't miss out.

With all this packed content, we almost forgot to mention our guide to Jelly Bean, which we've updated to the new 4.2 release. It will be coming to most smartphones and tablets in the next few months, so we've also done some detective work to find out whether your Android device will get some upgrade love.

Enjoy the issue and don't forget to keep up with more great apps and reviews at T3.com.

James Stables, editor
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T3 Presents

GUIDE TO

Android

CONTENTS

Editor's letter Pt5 3

JELLY BEAN REVEALED

Android 4.2 explained Pt5 8
Guided tour of Android Jelly Bean and all the new features

Update to Jelly Bean Pt5 20
Find out whether your handset is getting an upgrade

ANDROID UNCOVERED

Guide to budget tablets Pt5 26
How to spend less on an Android tablet without getting stung

Get started with Chrome Pt5 34
How to get the most from Google's home-baked browser

50 Android tips Pt5 36
Become a power-user with our list of the best shortcuts and hacks

GET MORE FROM ANDROID

Explore Google Now Pt5 48
Control your phone with your voice using Google's new tech

Master Google Maps Pt5 52
All the new features of the indispensable Google Maps

Put tunes in the cloud Pt5 54
Use Amazon's MP3 app to hear your music anywhere

Get the news first Pt5 56
Stay ahead of breaking news with the new Google Currents service

Take stunning pictures Pt5 60
Add amazing after effects with Camera Zoom FX

Win any pub quiz Pt5 62
Get the answer to any burning question with Quora

Explore the YouTube app Pt5 64
Enjoy the best of YouTube with the bespoke Android app

Secure your device Pt5 66
Essential guide to protecting your Android device from thieves

Go on a treasure hunt Pt5 70
Play Munzees, the real-world game you play with your phone

All-day battery guide Pt5 72
Make your Android device last all day with these top tips

Power up your tunes Pt5 74
The ultimate guide to mobile music services on Android

Find the best movies Pt5 76
Stay entertained with our pick of the best services for movies and TV

BEST APPS

Guide to games Pt6 8
We run down the best button-bashers on Google Play

100 essential apps Pt6 14
Don't pay for apps – use our freeloader's guide to Google Play

RATED

Accessories Pt6 34
MyTunes Speaker; Plantronics M55; Powerfreakz Evolution 3000 Solar Portable Charger; Soundblaster Axx 10; Angry Birds Earphones Green Pig; Samsung 32GB Class 10 Micro SDHC; Philips PicoPix PPX 1430 Mini Projector; Samsung Galaxy S3 i9300 Premium PU Leather Flip Case; Parrot AR Drone 2.0; Ted Baker Typewriter Sleeve; Incase Sonic Over Ear Headphones; Philips Fidelio M1; Scosche Rhythm Armband Pulse Monitor; Adonit Jot Pro Touch Stylus; Targus Stylus Tablets Silver; iTALKonline Black White Flower FlipMatic Easy Clip on Vertical Pouch Case; Samsonite Aramon Nxt Shuttle; Crosskase Solar 15 Backpack; ReTrak Retractable Cables; Plantronics Voyager Legend; Panasonic RP-WF950EB-S Wireless Over Ear Headphones; Jabra SPORT Stereo Bluetooth Headset; Trident Kraken AMS Case; Seidio ACTIVE Extended Case; Moshi Moshi Pop phone; Urbanista London Headphones; Angry Birds Neoprene Sleeve Carrying Case; Philips Bluetooth SBH 9000; RapidNFC Mini NTAG203 NFC Tags; Logitech Mini Boombox; Bose MIE2i headphones

Smartphones Pt6 40
Google Nexus 4
Samsung Galaxy SIII
HTC One X+
Motorola RAZR MAXX
LG Optimus 4X HD
Orange San Diego
Motorola Motosmart
Samsung Galaxy Note 2
Sony Xperia T
Motorola RAZR i
Sony Xperia Tipo
Huawei Ascend P1
ZTE Grand X
Sony Xperia Go
Samsung Galaxy Beam
Vodafone Smart II

Tablets Pt6 57
Google Nexus 7
Google Nexus 10
Asus Transformer Pad Infinity
Samsung Galaxy Tab 2 10.1
Acer icona A510
Fujitsu Stylistic M532
Asus Transformer Pad 300
Samsung Galaxy Tab 2 7.0
Kindle Fire HD
Kindle Fire
Kogan Agora
Archos 101 XS
Samsung Galaxy Note 10.1
Toshiba AT300
Arnova 10b G3
Sony Xperia Tablet S

ON THE COVER

ESSENTIAL JELLY BEAN TIPS Pt5 36
Get more from Android 4.2 and make the most of your tablet or smartphone

BUY A BUDGET TABLET Pt5 26
We reveal how to get a decent tablet at a bargain basement price

SECRET OF ALL DAY BATTERY Pt5 72
Power-saving tips and tricks to help you squeeze more juice from your device

SAFEGUARD YOUR PHONE Pt5 66
Protect your phone from thieves and get it back if it falls into the wrong hands

150 AMAZING APPS Pt6 8
Our round-up of the very best games and apps available on Google Play

ULTIMATE BUYER'S GUIDE Pt6 40
Mammoth reviews section – 34 pages of the latest phones and tablets for every budget

4:10
Google
MY LIBRARY
Jonah Lehrer
IMAGINE
How Creativity Works
THE HUNGER GAMES
SUZANNE COLLINS
TRANSFORMERS
DARK OF THE MOON
COLDPLAY PARADISE
WIRED
How to Be a GEEK DAD
Kristen Stewart
You Tube

T3 Presents

Jelly Bean revealed

Android 4.2 explained **Pt5 8**
Guided tour of Android Jelly Bean and all the new features

Update to Jelly Bean **Pt5 20**
Find out whether your handset is getting an upgrade

Jelly Bean – all you need to know

The latest version of Android is here, with a host of new features, making it slicker, safer and easier to use than ever

Rather than jumping ahead a full version number from 4.0 to 5.0 with Android this year, Google has decided to slow down the new feature freight train just a little, expanding upon the solid foundation introduced with Android 4.0, aka Ice Cream Sandwich, instead.

This iterative release allows Google to catch its breath, while hopefully allowing carriers, developers and users alike the chance to play catch-up.

Of course, that doesn't mean Google has abandoned its traditional sugary confection-themed naming scheme; the name's Bean, Jelly Bean, and its mission is to hone Android into a leaner, meaner mobile OS.

Where Android 3.0 was exclusive to tablets, Ice Cream Sandwich attempted to port the slicker interface over to smartphones, and now Android 4.1 has arrived to smooth out the platform's remaining rough edges.

But will the changes that have been introduced in Jelly Bean be enough to finally make the ambitious goals of Google's Mobile Handset Alliance a reality? Or will handset manufacturers and carriers continue to bog down Android with their own skins, bloatware and other mostly unwanted encumbrances?

We may not have the answers to those questions just yet, but there's no denying that Android 4.1 Jelly Bean is the best version of Google's mobile operating system to hit our devices so far. And it's certainly the most 'buttery' smooth mobile OS we've ever used. Confused? Read on to find out all about it...

Google Play
PLAYLISTS
RECENT
ARTISTS
Other Peoples Problems
Breton
Django Django
Django Django
The Undertones
The Undertones
SAMSUNG
Google
Reg Hardware
EurekAlert
Formula 1
FORGOTTEN
NORMAN DAVIES
WHITE EAGLE
RED STAR

Google Now

The major new feature in Android 4.1 is Google Now. Combining the best of search with key information that you'll want to access quickly throughout the day, Google Now requires zero setup from the user, other than enabling it in the first place.

Google Now presents a series of cards that depend entirely upon how you interact with your device. Let's say you need to navigate to another location; a lunch meeting or other appointment, for example. When you open Google Now, a card for your event is ready to go at the top of the stack. Tapping 'Navigate' throws you into Google Maps Navigation, and guides you to the destination.

Once there, Now remembers your destination and offers to take you back home or to your next appointment, should you have one, even telling you how long it will take to get there. As it learns your patterns and habits, it becomes smarter and starts to second-guess your next move based on where you are, the time of day and even calendar information.

Google Now includes cards for traffic, public transport, flights, next appointment, sports, places, weather, translation, currency and time at home, the majority of which are aimed at city dwellers or world travellers.

Similar to the Camera Unlock introduced in Android 4.0 Ice Cream Sandwich, Jelly Bean users can now jump straight into new intelligent search engines from the unlock screen. You can also swipe up from the home button to access the clever information system that could very well blow Apple's Siri out of the water.

Speed boost

Promising to be the "fastest and smoothest version of Android yet", Jelly Bean's speed enhancements are all thanks to Google's Project Butter. As ridiculous as the name sounds, Project Butter seeks to improve navigating around your smartphone or tablet, making vital changes under the hood, which makes everything quicker and means a vastly improved touch response when you are scrolling through your apps, for instance.

We compared the boot time of two Samsung Galaxy Nexus handsets – one running Android 4.0.4 and the other running 4.1 – and found a real difference in startup time: 50 seconds for the elder software, versus 34 seconds for Jelly Bean. The 4.1-powered Nexus 7 is somewhere in between, at 43 seconds.

For perhaps the first time ever, moving around within Android is just as smooth as with iOS, whether it's from the smaller display of the Galaxy Nexus or all seven inches of the Nexus 7.

Turbo touch

Google has used a variety of methods to accomplish Jelly Bean's slick performance, ranging from vsync timing (ensuring a consistent frame rate across all screen drawing and animation) to triple buffering, which appears to be the key component in creating an overall smoother feel across the user interface.

However, it's not just improved frame rates and faster gesturing that makes Jelly Bean fly. Android 4.1 also synchronises the very touch of your finger to its vsync timing, attempting to anticipate where you'll want to go next.

Finally, the software steps on the gas at just the right time, offering a boost in processing power at the next touch event to cut down on any latency that may be remaining.

None of this tech jargon is going to mean much to end users – all they'll know is that the system is more responsive to their touch, allowing faster browsing, faster searching and faster access to their media content.

Android Beam

Android Beam didn't live up to a lot of its promises within Ice Cream Sandwich, but there are now plenty of devices on the market offering near-field communication (NFC) chips, and that means Beam is finally ready for prime time with Jelly Bean.

In addition to sharing contacts, web pages, YouTube videos, directions or even links to apps just by touching two Android devices back to back, Jelly Bean enables sharing of photos or videos in the same way.

There's just one caveat: this can't be done with devices still running Ice Cream Sandwich as of yet. Try it and you'll seen an error about large file transfers not being supported. We'd be surprised if Google hasn't fixed this issue by the time you're reading this.

Chrome surfing

Building on the enhanced functionality introduced in Android 4.0 Ice Cream Sandwich and Android 4.1 Jelly Bean, the Nexus 7 is first Android tablet to have Google Chrome as the standard web browser. That means that you can expect speedy page loading, fantastic rendering and the ability to sync your favourite sites from your desktop computer straight out of the box.

We ran our usual barrage of web browser tests on mobile Chrome, comparing a Samsung Galaxy Nexus running 4.0.4 against the same device under 4.1. The Jelly Bean-equipped handset trumped Ice Cream Sandwich with a Peacekeeper score of 452 compared to 461.

With hardware-accelerated page rendering, Chrome is able to quickly

Android 4.2 in detail

As ever, Google is hard at work making Android the best it can be, and the next step in that evolution is Android 4.2. Despite being a new version, it's keeping the Jelly Bean moniker - perhaps to emphasise the fact that it's just a small update. There are still things to get excited about, though.

Photo Sphere

First up is Photo Sphere. It's an addition to the camera app that's clearly been inspired by the company's Street View.

It lets you move around while taking photos – look up and down and pan, and it captures everything in a series of connected images, right up to creating a full 360° panorama. Much like how you can look around in Street View – just on a smaller scale.

Photo Sphere images are saved as JPEGS and you're not limited to viewing them on your Android device. You can view them on computers, email them or post them to Google+ (and presumably other social networks, too), and all the image data remains intact. You can also add the images to Google Maps and let the whole world see them.

Multiple user profiles

Android 4.2 also allows for multiple user profiles on a single device. Much like user accounts on a PC, with Android 4.2 you can switch between users from the lock screen, enabling each person to have their own unique homescreens, bookmarks, apps and email accounts. In other words, multiple users can customise the device to their liking and keep their privacy.

Gesture Typing

Another feature of Android 4.2 is Gesture Typing. This lets you slide your finger across letters to create words, rather than tapping on them, promising faster, simpler text entry. It sounds a lot like Swype but, with Google's support, it could do wonders for speeding up text entry on touchscreens. Android 4.2 promises better word prediction and more accurate dictionaries, too.

Google Now

Google Now is getting a bit of a much-needed overhaul. This is happening in the form of a variety of new cards, adding new functionality to the service.

With cards for flight information, hotel and restaurant reservations, shipping details, nearby attractions, movie times at local cinemas, concert information for artists that you like, and interesting nearby photo spots, it should be more useful as a virtual assistant.

Other additions

Android 4.2 also supports wireless display, which means that if you have a Miracast compatible HDTV, you can wirelessly stream videos and games to it.

Daydream is another Android 4.2 feature, which sounds like a customisable screensaver. For example, it displays photo albums or the latest news whenever your device is idle or docked.

Google is also rolling out movie purchases from Google Play to the UK, Canada, France, Spain and Australia, and on 13 November its popular Music service will be available in Europe. This allows you to upload up to 20,000 songs to the cloud for free, and access them on any Android device or browser.

Plus, any song that you purchase from Google Play will automatically be added to your online library without even needing to upload it.

load long pages which would otherwise have been a chore for smartphones, and the classic search and address bar is also present, removing the need for a search bar and saving valuable space on your device.

Scrolling between tabs is also made easier. By sliding from off the edge of the screen to the other side, you seamlessly change tabs, while the main screen shows you all your most visited websites and gives you easy access to your bookmarks.

Notification facelift

Jelly Bean introduces an overhaul to notifications, with new APIs so developers can make better use of this vital area of the user interface. Gone are the neon blue highlights, now replaced with a much cleaner white.

The first thing you'll notice with Jelly Bean notifications is that they have increased in size. Not only does that make them infinitely more readable, but in the case of built-in apps such as Gmail, you can now get a quick preview of incoming emails as they arrive.

You'll also see that the current time is now displayed prominently on the left, with the day of the week stacked atop the date. And there are still handy buttons to jump straight into Settings or to clear notifications, and on the Nexus 7, a software-based rotation lock button has also been added.

Speaking of the tablet-centric version, while notifications take up the entire display on a smartphone, the window appears as a smaller window on the Nexus 7, displaying the name of your currently connected wireless network or carrier at the bottom.

Jelly Bean also introduces a method for completely hiding apps from sending notifications, but Google has tucked it away in an unlikely spot. Pulling up an App Info window now includes a 'Show notifications' box underneath the 'Force stop' and 'Uninstall' options.

Clever updates

Where supported, dragging up on a notification with two fingers collapses it to a single row, while doing the reverse expands it. In the case of Calendar events, users can even act upon information, such as snoozing an alarm or emailing invited guests.

Likewise, incoming missed phone calls can be returned quickly thanks to a handy callback button, while your photographs can be shared with ease right after being taken. Oddly, the stock Gmail and Email apps don't currently allow you to act upon their incoming missives, although a tap quickly opens the respective app.

For now, these two-finger drag actions are exclusive to Android's built-in native Google apps, but that's likely to change in the days, weeks and months ahead as developers tap into the new API to create their own third-party apps.

Widget resizing

While Apple's iOS operating system remains widget-less, Google continues to refine the feature, with users now able to drag widgets on to their homescreen, which then automatically shifts app icons around it, enabling you to change the size of the widget, depending on how much screen space you are willing to give up for it.

Whereas previous versions of Android made it quite tricky for widgets to be placed anywhere on your homescreens, Jelly Bean now very kindly moves icons or even other widgets out of the way for you so you can get exactly the customised layout that you want.

And even more importantly, supported widgets are now completely resizable – tap and hold, and up pops a blue dot on each of the four sides. Grab one, move it to your liking and then tap outside of the widget to commit the change to your phone.

Multimedia market

The biggest improvements to Google's content store are the addition of magazines, television shows and movies, which you can now rent and buy. Well, buy at least in the UK, due to copyright matters (and you can also forget about music for now if you're resident in Blighty).

We hope that the extra content does arrive on these shores pretty soon though – ever since Google Play emerged from the ashes of the Android Market, we have been very impressed with the slick user interface, ease of use and the really neat integration with other apps.

Hey, good looking

Although many of our complaints with the stock Android graphical interface were wiped away with the introduction of Ice Cream Sandwich, the majority of Android users are still living with a heavily skinned version of Google's mobile OS.

This latest major release of Android finds Google at the top of its game, showing restraint when it comes to feature bloat while streamlining what worked so well with Ice Cream Sandwich – and making it even better.

During the boot-up, Jelly Bean briefly follows the familiar white Google logo with a pulsing blue, red, green and yellow X, before being presented with the fine-tuned UI.

The custom Roboto font is still very much present and accounted for (with a few subtle tweaks depending upon where you're viewing it), and Google has reduced Android's dependence on neon blue accents, while retaining the same dark background.

In short, it's the arts of Honeycomb and Ice Cream Sandwich you know and love, with the odd nip and tuck resulting in welcome improvements.

Camera action

The decision not to include a rear-facing camera on the Nexus 7 means the tablet misses out on a some nice new additions to the Camera app. Android 4.1 Jelly Bean smartphone snappers will, however, be able to benefit from being able to review photos straight from the camera application, and swipe away photos you don't want to keep, similar to the way you can dismiss applications using the Recent App feature still present from Android 4.0 Ice Cream Sandwich.

When it comes to looking through your pictures, you can now pinch into a filmstrip mode, making it easier than ever to find that embarrassing picture you simply must delete, with a simple swipe down resulting in the offending image being vaporised. You can, of course, get back a mistakenly deleted snap back with a simple tap.

One size fits all

Google has tailored its new operating system so it adapts itself to present information in different ways, depending on the screen size of the gadget it is running on.

For example, on the Nexus 7 tablet and other forthcoming 7-inch slates, the user interface will differ from the experience on 10-inch Jelly Bean tablets. The Nexus 7 boasts a vertically-themed UI, while 10-inch slates will proceed with the landscape navigation and notifications interface that we're used to, thanks to the likes of the Samsung Galaxy Tab 10.1.

Keyboard strokes

While we found the Ice Cream Sandwich soft keyboard to be one of the best available on any mobile

➜

platform, Jelly Bean kicks things up a notch or two by making the keyboard smarter and more accurate than before. Text-to-speech has also been improved with Android 4.1, while voice typing now works even when you don't have a data connection.

The keyboard's 'brain' grows over time, with its bigram prediction engine evolving over time, depending on your text and typing habits. It's also much simpler to switch languages, handy if you're the multilingual type.

Voice recognition

As well as a slick new user interface, the capabilities of voice search have been considerably improved now, most notably with the ability to dictate messages without using the keyboard while in offline mode.

And the voice searching facility has become a whole lot better as well. No longer are you simply talking aloud what you could be typing – you are now able to speak to your smartphone or tablet as though it's alive.

Ask it how tall Tom Cruise is, for example, and you'll be give a card result of little Tommy's face, along with his height details. Your Android device will also tell you just how small he really is.

It's not exclusively about getting celebrities' heights, though – you can ask it about the weather, the stock prices, pretty much anything you like, and it will respond. Providing it understands you, that is...

Gmail additions

Gmail hasn't been left out of the Jelly Bean revolution, getting a spruce up which includes both optimisation for smaller tablets – making it easier to read your mails and keep on top of your inbox at the same time – along with the new notification options that we touched on earlier.

Offline Maps

Maps users now have the ability to save area data for when they have no connection, which comes in quite handy for a Wi-Fi only device, such as the Nexus 7, or when roaming in strange and foreign lands.

We were able to select the majority of Greater London, as well as large parts of the Home Counties, while staying below the roughly 80MB limit for a single offline zone. However, the new 'My Places' menu enables you to save as many as you'd like – storage space permitting, of course.

As well as making content available offline and including additional reviews for chosen locations, Google Compass has been integrated deeper into Google Maps, particularly in the new indoor mode, which enables you to look around the room of a restaurant, for example, to get a more detailed

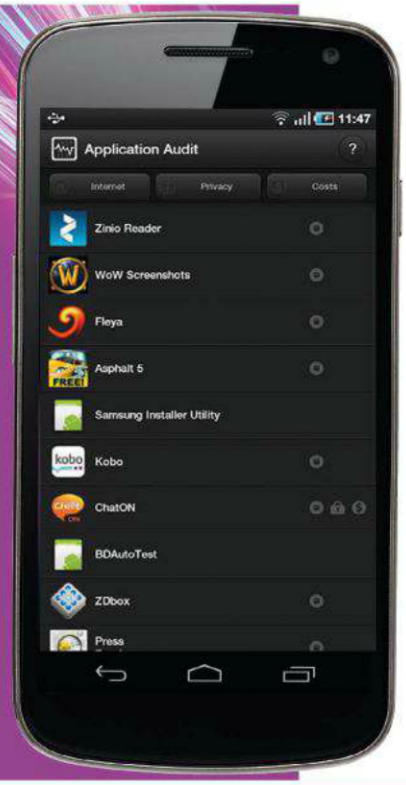
Focus on: Android security

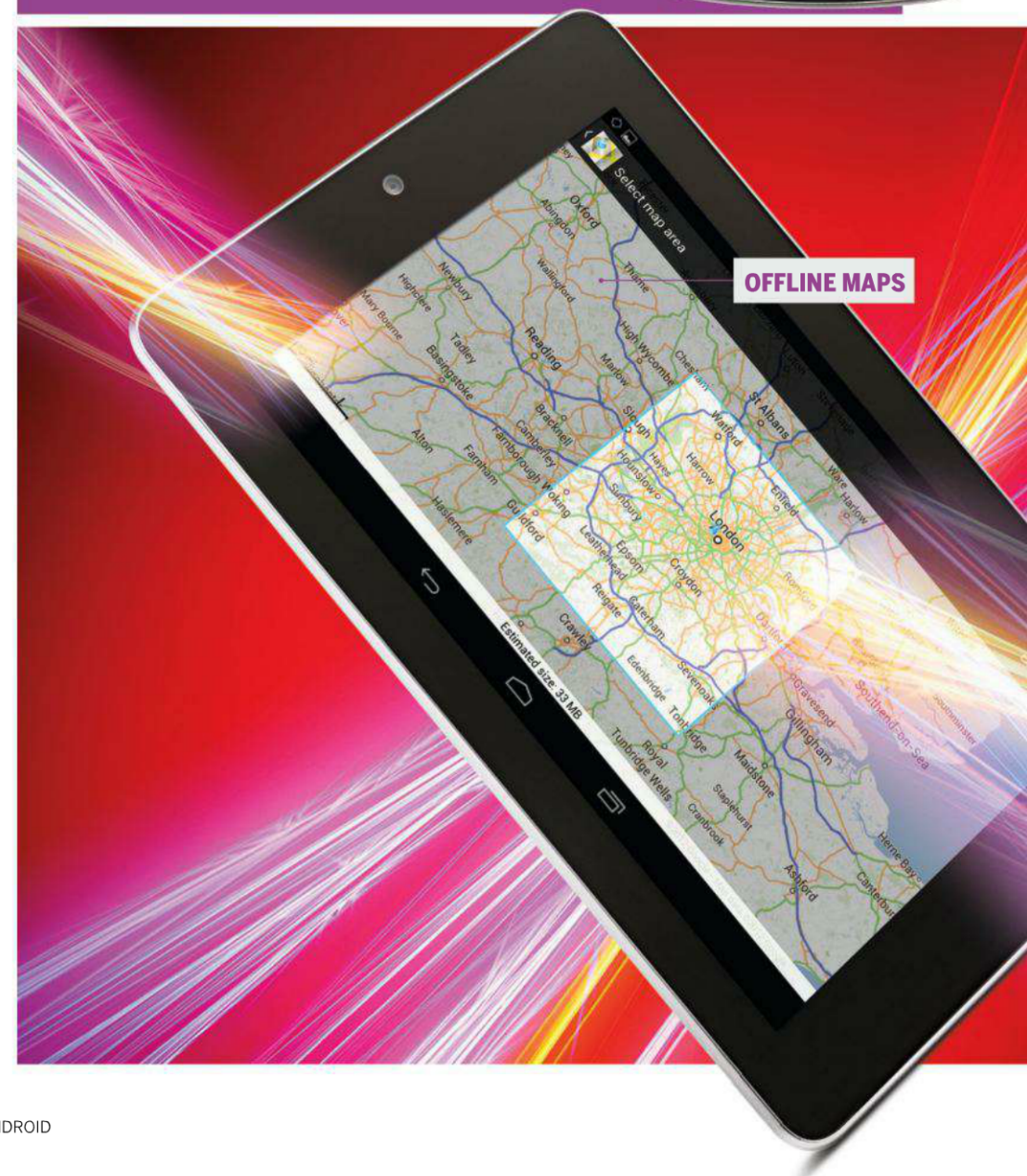
Security has always been a contentious part of Android, with the OS exposed to rogue apps, and Google Play criticised for not providing enough protection for users. And it's not just Android – smartphones are awash with data and payment information, making them targets for thieves.

Among the raft of improvements in Android 4.2 are security enhancements, and there's a new version of the malware scanner baked into the app. Google's expanded malware scanner builds on top of the already-existing Google Play app scanner by checking third-party apps. This includes software downloaded from the Amazon Appstore as well as sideloaded apps, providing protection for those who like to get under the hood of their Android phones.

Google promises that malware scanning on a device running the enhanced Jelly Bean OS will happen instantly and always in the background.

For those who aren't lucky enough to have the shiny new Android 4.2, there are third-party apps worth considering. Try BitDefender, which offers fantastic security scanning for free, but even more importantly, can audit your apps for privacy violations and give you a report about what information your downloads are really accessing.





HOW TO
HACK YOUR LIFE WITH TECH

GET ANDROID'S LATEST KEYBOARD ON YOUR DEVICE TODAY

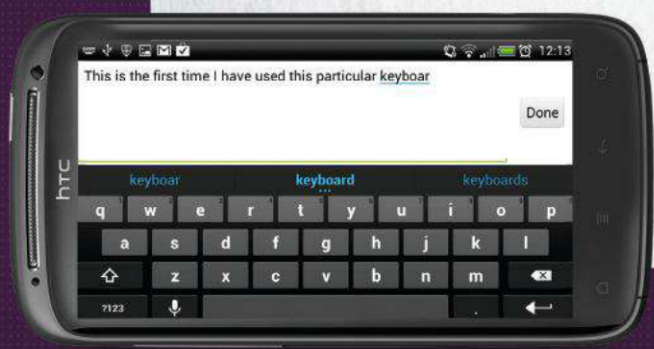
Android devices have an awesome array of keyboards, but our favourite is the one supplied in Jelly Bean

{AT A GLANCE}
SKILL
Straightforward
TIME NEEDED
10 mins
SUITABLE FOR
Android

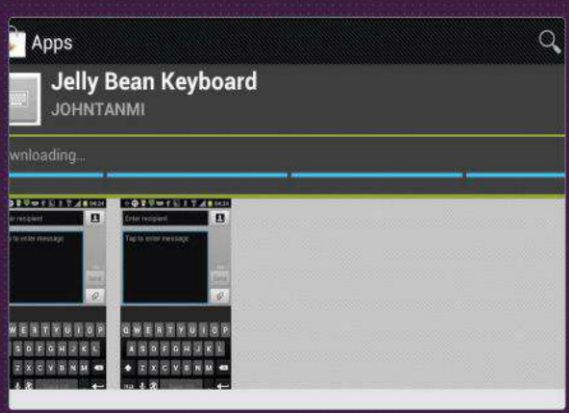
Android's latest update, known as Jelly Bean, includes a vastly upgraded keyboard. It's one of the best we've ever used, supporting predictive text and other high-end features while remaining nicely uncluttered and simple to use. It's fast and accurate, and it includes SwiftKey-esque word prediction.

It's not available on all devices, but if you're running Android 4.0 – Ice Cream Sandwich – it will work with it. You can find out which version of Android you're running by tapping the 'Menu' key from the homescreen, then going to 'About phone' and tapping 'Software information'. Your version will be listed under 'Android version'.

Jelly Bean keyboard is a completely free download, too, but you can purchase a donate version if you enjoy it.



KEYBOARD CRAZY

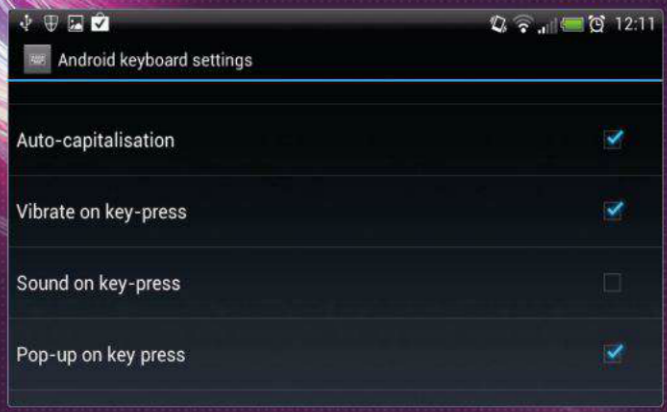


1 Play the keyboard

Jelly Bean Keyboard is available for free on Google Play. Search for 'Jelly Bean Keyboard' and then tap on the entry made by Johntanmi. Tap 'Install' and it downloads and installs on your device. You don't get the usual 'Open' option because it installs directly into the keyboard options of your device.

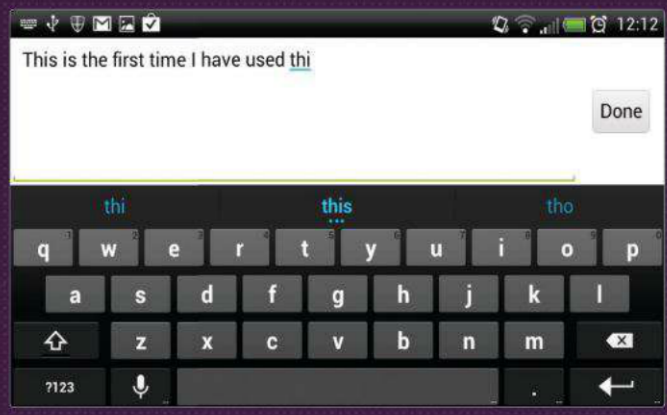
2 Ready for this Jelly

Press the 'Home' key on your Android device, then tap the 'Menu' key and choose 'Settings'. Scroll down to 'Language & Keyboard' and check the tick box next to 'Android keyboard (AOSP)'. It warns you about collecting data, but this isn't an issue because Jelly Bean Keyboard doesn't communicate with the internet.



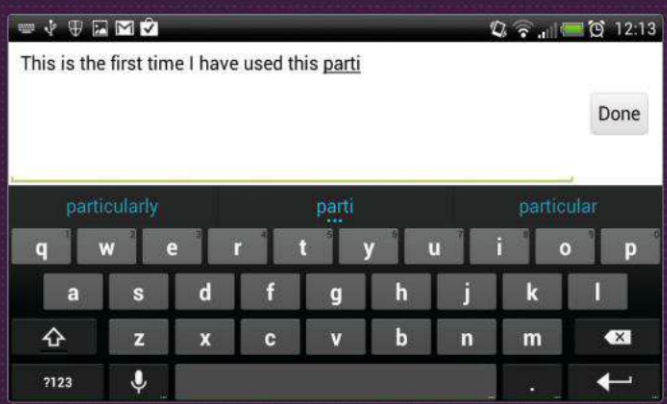
3 Aisha... I'm vibrating

We need to set Jelly Bean Keyboard as our default keyboard, so tap 'Default' and choose 'English (UK)' Next, tap on the slider settings to the right of 'Android keyboard (AOSP)'. Here you can set vibrations, sounds and other preferences. Once you've set it up as you want it, tap the 'Back' key.



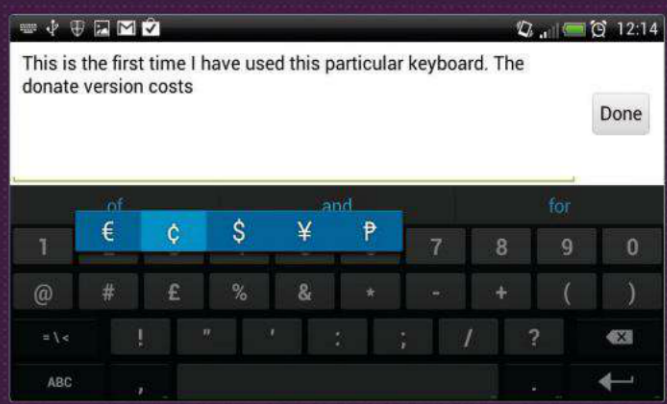
4 As easy as ABC

Now compose a new text or email to get the hang of Jelly Bean Keyboard – it pops up as soon as you begin entering text. Tap some random words into the keyboard and it automatically predicts the word you're typing, with three options displayed above the keyboard.



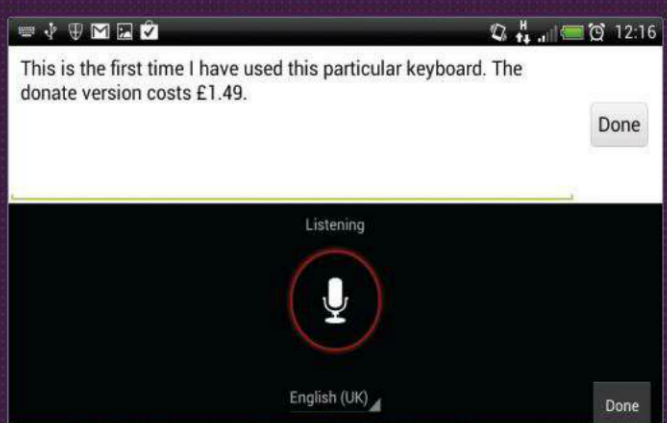
5 So predictable

Tap one of these options to enter it. If you're typing a word that isn't in the dictionary, it is displayed in the centre box. There may be multiple suggestions, so just tap the correct word to enter it into your message, and then tap the word once more to save it to your dictionary, so it will be recognised next time.



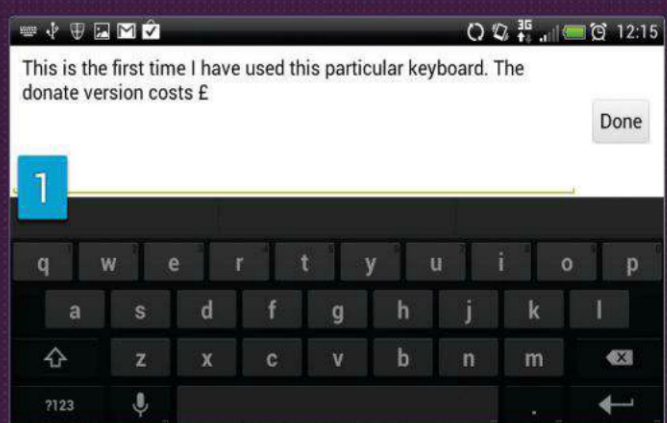
6 As easy as 123

You'll see numbers to the upper-right of the letter keys. Long-hold on these to enter the numbers. Press and hold the '.' key to see commonly-used punctuation marks and symbols. You can also tap '?123' to see more symbols and numbers. Tap 'ABC' to return to the main QWERTY keyboard.



7 The great dictator

A handy feature included in Android is voice-recognition, so you can dictate your texts and emails. Tap the microphone icon to the lower-left of the keyboard and speak into your phone. When you've finished, tap 'Done'. It's not perfect, so it may take a couple of attempts to get it right.



8 Dictionary corner

You've just got one of the best Android features on your device – well done! The more frequently you use Jelly Bean Keyboard, the better it gets at remembering words and predicting them, so try not to be lazy about saving words to the dictionary, and you will quickly have a more intuitive and natural keyboard. ■

viewing of the location you're planning to visit.

Buttery Calendar

Google's words, not ours – it really loves the butter then, eh? The new calendar app now enables users to send emails out to everyone if, for instance, you can't make a meeting. You'll also see a wealth of new animations, coloured entries, default quick responses for invites and a snooze button for when you're tied up.

The interface has been optimised for 7-inch tablets, and with that you'll have the option to expand or hide the controls. Add to this the redesigned Today tab, and you're looking at a vastly superior setup and, hopefully, a more organised you – although any failings with the latter can't be laid at Google's door as there's no excuses now.

Face unlocking

If you loved the Face Unlock feature introduced with Android 4.0 but had concerns about someone being able to use your photo to access the handset, worry no more. Google has beefed up Jelly Bean with a blink detector, which now asks the user to blink their eyes to confirm they're a living, breathing human being and not just a static image.

The Face Unlock tech introduced with Ice Cream Sandwich was soon found to be easily bypassed using a photograph of the phone's owner. Google's new feature, that it's calling Liveness Check, should mean an end to such shenanigans.

Security guard

Android 4.1 Jelly Bean won't be as easy to exploit as older versions, because it is the first Android edition to properly incorporate address space layout randomisation (ASLR). ASLR is an industry-standard defence against hackers looking to install malware on your devices.

ASLR randomises the memory locations for the library, stack, heap and other data structures, which means that there's no way of the hacker telling where the malware will land on the handset, rendering it scrambled.

Factor in a second layer of defence known as non-executable memory protection and you've got yourself some basically harmless code instead of malicious malware running on your Android device.

Better People

The People app, first introduced in Android 4.0, has been vastly improved second time around, with the inclusion of improved search performance, smoother animations, high-res images for your Google+ pals and automatic image syncing.

You can also add your favourite

contacts to a homescreen, directly from the contact's details page, or clear the frequently contacted list from the favourites tab with ease. All this and a newly optimised UI as well. And it's all much more "buttery" too. You just knew it would be, didn't you?

Google ears

Introducing a much deeper integration of Google Play into the Jelly Bean UI, Sound Search is a Shazam-like widget that can identify a song, revealing information about the track name, artists and the album it is taken from.

The 'What's this song?' query sits anywhere on the homescreen. Simply tap it while a song is playing and the device throws up EQ-style meters as it analyses the tune; if recognised, track, artist and cover art info are displayed next to a button for immediately buying the song from Google Play Music.

The Sound Search widget correctly identified most of the tracks we threw at it, with only some of the more obscure (and presumably Google Play-less) songs tossed back as unidentified. Unfortunately, it's US-only at the moment, though.

YouTube views

The video sharing app has been given a smart new high-definition makeover, bringing an interface much more suited to the 7-inch surroundings of the Nexus 7. This includes the new side navigation bar, which enables you to quickly jump into categories such as trending videos and recommended clips.

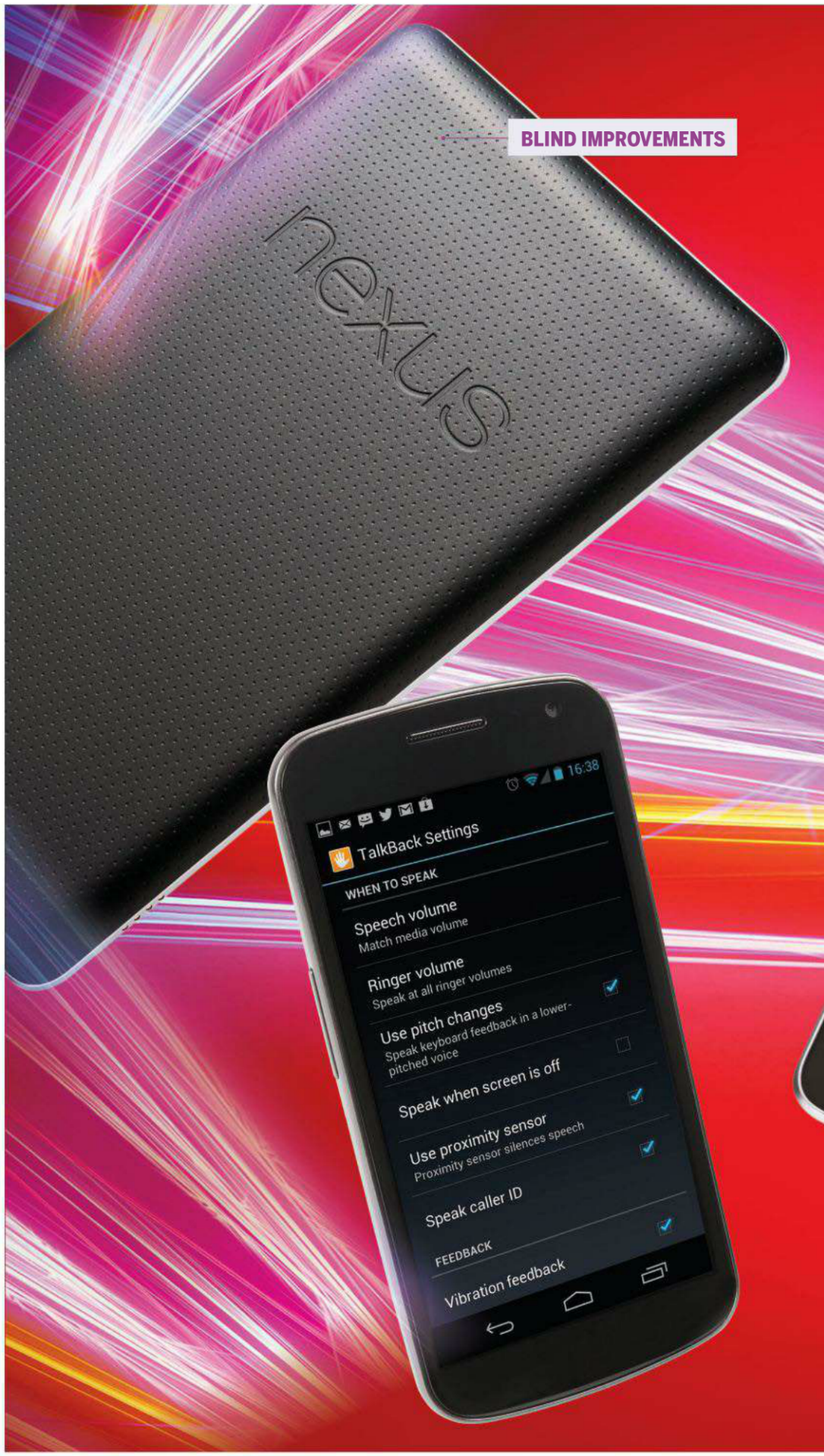
The YouTube app can now preload videos from subscribed channels for quicker playback even on sluggish networks. And, with a new integrated menu, you can easily watch your favourite clips on your big screen TV with Nexus Q or YouTube TV.

Blind improvements

Google has finally caught up with the excellent accessibility options Apple bakes into iOS, by now allowing blind users to use a new Gesture Mode in Jelly Bean.

This means that visually impaired Android fans can navigate the UI with only touch and speech output. New APIs also extend these abilities, allowing developers to offer external Braille input/output devices capable of connecting via USB or Bluetooth.

TalkBack, the accessibility feature that provides spoken feedback (such as describing what has been touched or selected on the screen) has also seen gesture support added to its repertoire, in order to make it much easier for people to navigate their Android device and use it naturally. ■



GOOGLE EARS
IMPROVED YOUTUBE
Google
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$0.99
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ACCOUNT
paultlamkin
Add Channels
CHANNELS
Channel Feed
FROM YOUTUBE
Recommended
jacksgap
JACK AND FINN NAKED BUNGEE JUMP | 100,000 SUBSCRIBERS
totalhalibut
The Mailbox -
runesharkvideos
matroix

Jelly Bean update guide

Is your tablet or smartphone due an upgrade to Android 4.2? Or is your handset still waiting for Ice Cream Sandwich? Read on to find out when you're due an upgrade

Samsung: Android 4.1 & 4.2

The official Android 4.1 Jelly Bean update for the Samsung Galaxy S3 has begun rolling out to handsets in Eastern Europe. Samsung says that Android 4.1 is "gradually being introduced to other markets" – although there's no exact dates for the UK or US at this time.

The Korean firm has also confirmed that it will be bringing Jelly Bean to the following devices in due course: Galaxy Tab 2 7.0 and Tab 2 10.1, Galaxy Note 10.1, Galaxy SII, Galaxy Note, Galaxy

Tab 7.0 Plus, Galaxy S Advance, Galaxy SII LTE, Galaxy Music, Galaxy Chat, Galaxy Ace 2, Galaxy Beam, Galaxy Ace Plus, Galaxy Mini II and the Galaxy S Duos.

The new Samsung Galaxy S3 Mini and Samsung Galaxy Note 2 both ship with Jelly Bean out of the box, and in the UK, once EE gets its 4G network up and running, the Samsung Galaxy S3 LTE will also sport Android 4.1 from the off. Three, O2 and Vodafone have started to roll out the Android 4.1 update to Galaxy S3 customers in the United Kingdom, with users able to get Jelly Bean over the air or by plugging in the handset to their computer and using the Kies desktop software. The Korean company said, "Samsung UK can confirm that the roll out of Android 4.1 (Jelly Bean) has begun for our Galaxy S III customers and will be available across all networks over the coming weeks, pending software testing and approvals."

We're still waiting for Orange and T-Mobile to release the Jelly Bean update to Galaxy S3 users, with T-Mobile telling us, "T-Mobile is working closely with its device manufacturing partner Samsung to roll out a Jelly Bean update as soon as possible. As soon as we have an exact timeline in place, we will confirm."

However, there's no word on updates to the brand new Android 4.2, which has just been released on the Google Nexus 10 and Nexus 4. With the achingly slow roll out of 4.1, we'd be surprised to see the newest version hit Samsung phones before next year.

Asus's close ties with Google mean its devices are getting the Jelly Bean treatment

Asus: Android 4.2

Asus has been working closely with Google, most notably with the release of the Google Nexus 7, which debuted Android 4.1 Jelly Bean, but its update to the latest version of Android 4.2 has been delayed. At the time of writing, Asus was still waiting for its over-the-air update. However, while the Nexus is one of the first devices expected for an update, the rest of the line-up is still lagging behind. The Transformer Pad 300 has finally been given the Jelly Bean treatment – so make sure you hit software update check if you're still on Ice Cream Sandwich.

The Asus Transformer Pad Infinity and the Asus Transformer Prime have also been treated to an early update to Jelly Bean.

The HTC One X+ comes with Android 4.1.1, but as yet the upgrade to 4.2 is not confirmed

HTC: Android 4.2

HTC One X+ comes running Android 4.1.1, which was the latest version of Jelly Bean up until just before it arrived in stores, as Google launched Android 4.2. Fear not though, because Android 4.1 is a fine mobile platform and we're pretty sure the One X+ will get a bump up to 4.2 in good time, although HTC is yet to officially confirm this.

HTC has announced it will be bringing Jelly Bean to at least three of its models, which is good news for those who like newer handsets.

HTC has confirmed its One X and One S devices will be getting Android 4.1 in November and December respectively, and the update will land with an enhanced version of Sense – cunningly named Sense 4+ after its debut on the HTC One X+.

"We know HTC fans are excited to get their hands on Google's latest version of Android. At this point in time, we can confirm that we have plans to upgrade our HTC One X, HTC One XL and HTC One S to Jelly Bean," a HTC spokesperson told us.

LG: Android 4.1

Back in February at MWC 2012, we spoke to LG regarding the Jelly Bean update, and the manufacturer confirmed it would guarantee an upgrade to Android Jelly Bean for all compatible 2012 handsets.

LG has now confirmed it will start rolling out Android 4.1 to the Optimus LTE 2 in November, and then to the Optimus G in December.

It's also said that the LG Optimus Vu and Vu 2 will get Jelly Bean in the first quarter of 2013, but still no word on the Optimus 4X HD or the Optimus L7.

Toshiba: Android 4.1

Toshiba has confirmed that it will be providing Android Jelly Bean to its AT200 and AT300 tablets, although no time frame was given for the roll-out. Toshiba refused to be drawn on any dates, and said it was unable to comment on the timeline of Jelly Bean updates at this point.

Toshiba's AT300 is due to get Jelly Bean, but the company is keeping quiet about when

Sony: Android 4.0

Sony may have released a slew of Xperia handsets in 2012, but the bad news for those who have forked out for a new handset is that the Japanese manufacturer isn't rushing to ready Android 4.1 for your device. What's more, Sony hasn't even yet finished rolling out the Ice Cream Sandwich update to its handsets. On its blog, Sony wrote, "We are actively investigating Android OS upgrades for all devices, but in the meantime, our Ice Cream Sandwich rollout for Xperia S and 2011 Xperia smartphones continues as planned."

Sony is being slow to release updates, with many handsets only just getting Ice Cream Sandwich

ZTE: Android 4.1

A ZTE spokesperson has told us, "Although Google has released information about Jelly Bean, the company is yet to publish the source code release date.

"Therefore it is currently impossible to estimate a date for the ZTE Jelly Bean upgrade at this point. Based on historical forecasts, Google requires one to two months to complete the source code release before manufacturers can begin to develop Jelly Bean based versions of devices."

Not wanting to be left behind, however, ZTE has launched the first Jelly Bean handset in China, and third in the world, in the shape of the ZTE N880E. It's unlikely to make it to other territories, but it does show that manufacturers can get Jelly Bean out the door quickly.

Intel: Android 4.1

Intel has confirmed it is working with Google on a Jelly Bean port for its Atom processors, which will allow the latest version of Android to run on handsets and tablets with Intel inside, such as the Orange San Diego. There's currently no sign of a release date, so Intel smartphone owners are going to have to wait for the foreseeable future. ■

htc
10:08 AM
AM 10 08
Sun, Feb 26
Barcelona
Mostly Sunny
12°C
16°C / 8°C
Market
Favorites
12:58

T3 Presents

Android uncovered

Guide to budget tablets Pt5 26
How to spend less on an Android tablet without getting stung

Get started with Chrome Pt5 34
How to get the most from Google's home-baked browser

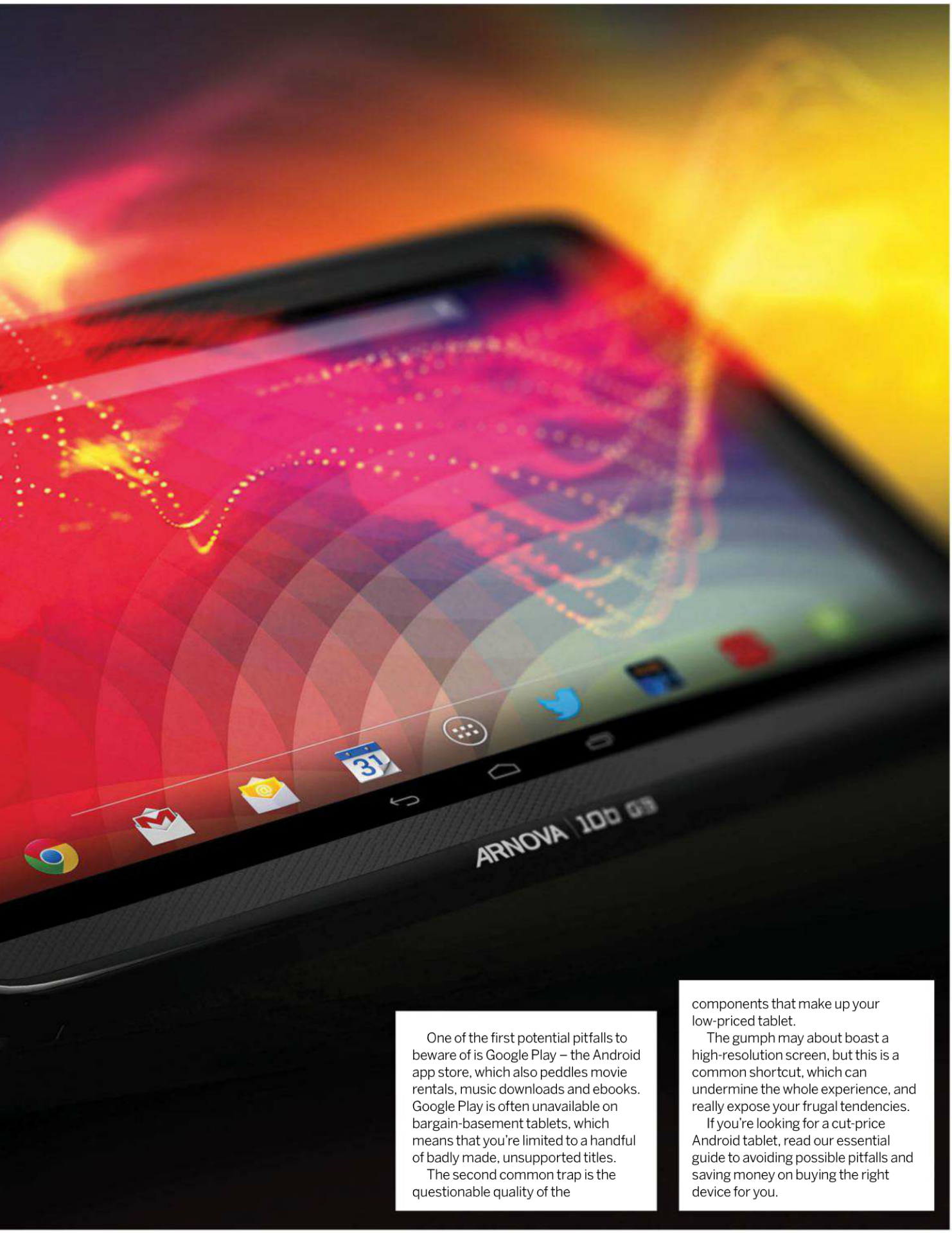
50 Android tips Pt5 36
Become a power-user with our list of the best shortcuts and hacks

Budget Android tablets: which one is right for you?

With many of the latest tablets costing several hundred pounds, you may be wondering how you can afford to get in on the Android action. Worry not, as we show you how to find a worthy budget device

Google and Asus may well seem to have sewn up the Android tablet world with the very well received Nexus 7 tablet (£160 – turn to page 57 of Part 6 for our full review), but there are many Android tablet options out there for much less money. This is thanks to a vibrant 'white box' Chinese manufacturing scene, which sees wave after wave of super-cheap Android tablets crashing into our shops, and surprisingly, some are pretty good.

While the Asus Transformer Pad Infinity costs a whopping £600, and the majority of other big-name tablets hover around the £200 to £300 mark, some of the smaller 7-inch Android tablets, even those running Ice Cream Sandwich, can be had for around £70 online or £90 on the high street. But for that kind of money, are you going to look like a bit of a mug? Of course, you don't get something for nothing, and while on paper, at least, budget Android tablets may look as powerful and potent as their big-name, large-price-tagged brothers, there can often be glaring omissions.



One of the first potential pitfalls to beware of is Google Play – the Android app store, which also peddles movie rentals, music downloads and ebooks. Google Play is often unavailable on bargain-basement tablets, which means that you're limited to a handful of badly made, unsupported titles.

The second common trap is the questionable quality of the components that make up your low-priced tablet.

The gumph may about boast a high-resolution screen, but this is a common shortcut, which can undermine the whole experience, and really expose your frugal tendencies.

If you're looking for a cut-price Android tablet, read our essential guide to avoiding possible pitfalls and saving money on buying the right device for you.

ON DISPLAY Even if a tablet has a capacitive screen, it doesn't mean the resolution will be OK

A DECENT DISPLAY

Even the cheapest of the generic Chinese Android tablets tend to feature capacitive displays these days, which are a vast step up in quality compared with the older resistive models that we used to see only a couple of years or so ago.

Capacitive technology means that the displays are more sensitive to the touch, making the experience of using even the cheapest of tablets, such as the budget Kogan Agora (£119 – see our review on page 68 of Part 6), much more satisfying than trying to poke the wobbly, plasticky resistive screens of previous generations of technology.

However, as nice as the newer, cheaper displays might be to touch, you also want to examine the resolution they offer. A 7-inch screen outputting at just 800 x 480 isn't going to look very clear or sharp, because that screen resolution is already a little out of date, even on the smaller screens of Android smartphones nowadays.

A decent budget option, however, such as the Archos 70 (available for about £170), offers a 7-inch display running at a more respectable 1,024 x 768, which will make everything from web text to apps appear much clearer than something that's expanding a lower resolution image to fill a 7-inch screen.

Another legacy Android issue that still affects some of the cheaper tablets these days is access to the Google Play Store. Some models from lesser known brands, such as the ViewSonic ViewPad 10e (available for about £140) don't have the certification to offer access to Google's official app store on board, although most of today's newer budget models now do.

Again, official Google Play access is something to add to your pre-purchase checklist, because you really don't want to be stuck using a terrible, unofficial Chinese app store to access all your apps and games.

→

Why switch to Linux?

The top 10 reasons to give it a try today

1 Linux is free

Is Windows 7 really worth spending £100? Are you actually going to get £100 of value from it, or are you just going to use the same old programs you use on XP? Linux is free, now and forever. You pay nothing and get great software – what's not to like?

2 Linux is fast

A few years ago, your computer was faster than a speeding Superman, so what happened to slow it down? Why does it take minutes to start up? Switch to Linux and let your PC perform at its best: maximum speed, all the time.

3 Linux has 1000s of apps

Want to make some music? Or burn DVDs? How about if you want to make a website? Or touch up some photos? Maybe you feel like running your own web site? Linux lets you do all this and more out of the box for no cost. Don't pay for software again!

4 Linux is secure

Hackers? Viruses? Remote exploits? We've heard of them, but only because Windows users get hacked so often. Switch to Linux and leave these security problems where they belong: in the last decade. No more viruses, no more critical updates. Poof – they're gone.

5 Linux is reliable

Do the words "blue screen of death" bring you out in a cold sweat? Stop losing your work. Stop having to run CHKDSK to fix problems. Stop rebooting every other hour. Linux will run and keep on running without a hiccup until you turn it off.

6 Linux works on any PC

Got a bang up to date wonder PC? Great! It'll run Linux. Got a PC from 10 years ago with an old CPU and limited RAM? That'll run Linux too. Got a PC from 20 years ago? Yes, even that will run Linux just fine. Whether you have 64MB of RAM or 4GB, Linux is ready for you.

7 Linux gives you choice

Choose from a dozen different web editors, two dozen text editors, three dozen programming toolkits, four dozen music players and thousands of games – get the perfect software for you. And the best bit is, it's all free!

8 Linux is easy to use

Get up and running with familiar programs like Firefox in minutes, then explore as much as you want. Plus, try as hard as you want, Linux is really hard to break – you can even leave your computer-savvy five-year-old alone with it for a day and it'll be unscathed.

9 Linux is growing

With a huge and growing community of friendly users, Linux is ready for people of all levels. From absolute newbies to hardened computer veterans, there's a place for everyone to join in, ask their questions, and meet like-minded people.

10 Linux is everywhere

Google uses Linux. Amazon uses Linux. BMW uses Linux. Nokia uses Linux. Intel, IBM, Oracle, Cisco, HP, Motorola, Novell, BT, Dell, Toshiba – yup, they all use Linux too. With millions of users around the world already using Linux, what's stopping you?

This advert brought to you by the absolutely unbiased folks at Linux Format magazine.

Linux Format: the easiest way to try Linux

POWER AND CONTROL

This new wave of cheap Chinese tablet tends to run on versions of the All Winner chipset, coupled with a Mali 400MHz GPU. It works well enough for most apps and general use, but the key thing you want to be looking out for is the amount of system RAM alongside it in the tablet.

Some of the cheaper tablets skimp here to save money, and only offer 512MB, which means the multitasking aspect of Android – one of its key boasts – is compromised, and performance is inevitably slower all round. At least 1GB of RAM ought to be the minimum to run Android 4.0 with any degree of success, and that's something that most of the sub-£100 tabs are actually offering today.

BRANDS FOR LESS

Thanks to the insane level of competition in the Android tablet world, you don't have to stick with the no-name models if you're looking for a good deal.

Samsung's second-generation Galaxy Tab 2 models have been reduced to under £200 (see review on page 65 of Part 6), while Motorola's Xoom, and its Xoom 2 sequel, can be picked up for around the £150 to £200 mark, giving you some seriously well-made technology for the money.

The problem with Samsung's models, for some people, is the manufacturer's continued use of its TouchWiz interface. While TouchWiz is great when used on a mobile phone, it makes a tablet feel like, well, just an enormous phone. It kind of takes the fun out of owning and exploring a new machine when it's running the same OS as your mobile.

Plus, makers such as Amazon take the skinning of Android even further, with the new Kindle Fire HD (£159 – see review on page 66 of Part 6), completely hiding most of Android's best features in favour of Amazon's own user interface. Yes, it's an Android tablet, but it's an entirely different experience to the rest of the pack, and something you may or may not prefer.

Also down to personal preference is your display size. For some, a 7-inch screen is more than enough, while others prefer the larger 10-inch option. In practical use, the only real hindrance of the smaller option is having to be a little more precise with your presses around the edges of the screen.

Google hides lots of Android functionality behind software toggles in the corners of the display, so for the big-fingered technology fan, the extra space afforded by the larger models is something to consider. Cheaper tablets, with their fatter, chunkier bezels, also make getting to the edges of the display a little tougher, too.

FLAMING AMAZON
You'd hardly know Android was inside the Kindle Fire HD

Emma's Kindle
9:28
Search
Shop
Games
Apps
Books
Music
Videos
HD
THE HUNGER GAMES
X-Ray
Customers Also Bought
The Hunger Games

CAN IT BE UPDATED?

The majority of the cheaper Android tablets under the £100 mark will arrive with an unskinned vanilla version of Android, untouched by the maker. While this is a good thing for most, because you're getting the purest vision of what Google and its team think Android should represent, it probably means you'll be stuck using the same version for life.

The advantage of spending a little more money on a branded machine from a western company means you should at least see some updates to the tablet's OS when Google releases a new version.

That's one big reason people are plumping for the Nexus 7 in such large numbers, because with Google's official backing, it ought to be first in line to see upgrades to future versions of Android, while it's unlikely there will be any such easy upgrade path for your random £70 Chinese SuperTab 7G XL.

Some companies have shown they're in it for the long term, and have won over fans with their approach to OS upgrades. Asus, for example, is continually releasing updates for its excellent Transformer series of machines, but those are high-end devices for which you'd expect a little more support.

In terms of the budget Android tablet makers, little French company Archos leads the pack in rolling out upgrades and supporting users, with owners of its cheaper machines benefitting from quite a few updates, including the newer versions of Android and minor bug-fixing repairs.

So don't just look at the hardware alone. Cheap tablets shouldn't be disposable and you have every right to expect some level of support from the manufacturer over the next year or two. And that's worth paying a little extra for.

3G AND CONNECTIVITY

Another consideration is whether you're the outdoorsy type or not. To save money, most of the cheaper tablets, and even Google's Nexus 7, ditch 3G connectivity, so you're stuck with using Wi-Fi to assess online features and download apps. If you've got used to piggybacking on friends' and pub Wi-Fi, that won't be an issue for you, but it's one of the reasons the cheap tablets are so very cheap, so bear it in mind.

Finally, something of an Android hot potato at the moment is support for upgrading the onboard storage. Many of the phone and tablet makers seem to be moving away from offering SD card support, with even the Nexus 7 failing to include it.

Ironically, that's one area where the cut-throat super-budget Chinese tablet scene always emerges as a winner, with virtually all of the cheapest Android models including an SD card slot. Again, as with 3G, it's down to personal choice, and whether you want or need the ability to shuffle around your media on SD cards. ■

NEXUS GENERATION Google's tablet is assured an upgrade to new versions of the OS

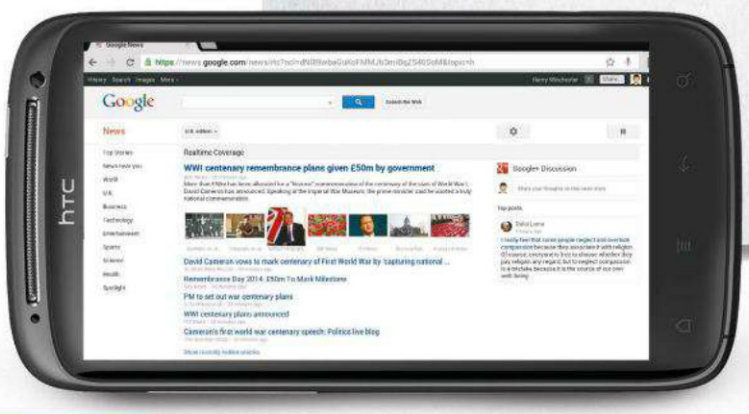
Google
MY LIBRARY
4:10
Jonah Lehrer
IMAGINE
How Creativity Works
THE HUNGER GAMES
SUZANNE COLLINS
TRANSFORMERS
DARK OF THE MOON
COLDPLAY
PARADISE
WIRED
How to Be a
GEEK DAD
Kristen Stewart
You Tube

HOW TO
HACK YOUR LIFE WITH TECH

GET STARTED WITH GOOGLE CHROME

Google's Chrome browser is great on a desktop PC, and now it's available on Android devices, too. Here's how to make the most of it

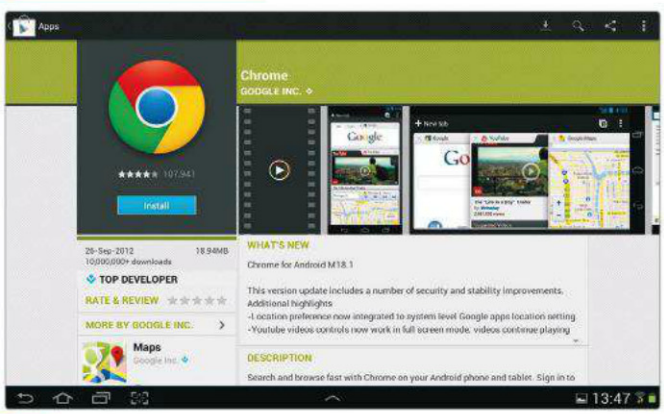
{AT A GLANCE}
SKILL
Anyone can do it
TIME NEEDED
15 mins
SUITABLE FOR
Android 4.0-plus



First released in 2008, Google's Chrome has gone on to become the most popular web browser in the world. The Android version of Chrome is pretty much identical to its desktop brother, albeit with a few adjustments to make it easier to use on a tablet or smartphone.

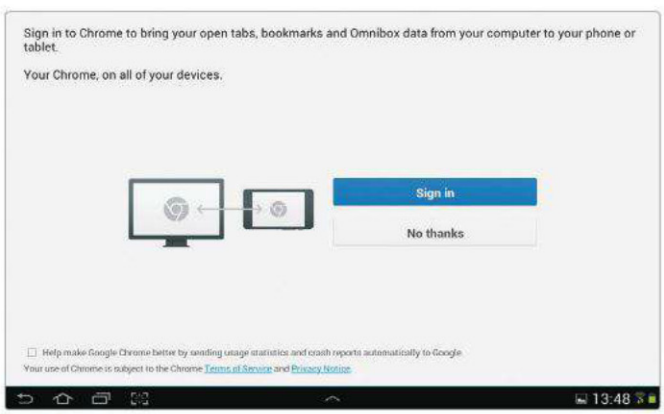
It's the best web browser we've ever used on any device by far, and it has a wonderfully slick and intuitive nature. It's also packed with useful features, such as the ability to link various devices together to share visited bookmarks, pages and passwords. To take advantage of this feature, you need to log in to Chrome on your desktop computer – you can do this by clicking the 'Menu' icon on the desktop browser, then clicking 'Sign in' and entering your Google credentials.

GET STARTED WITH CHROME



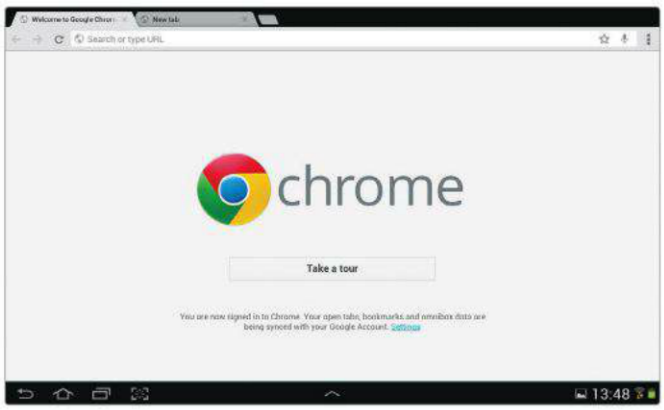
1 Get Chrome

Search the Google Play Store for 'Chrome'. Google Chrome is only compatible with devices that are running Android 4.0 or above, so if it's not listed in the Play Store, it's not available for your device, unfortunately. If you're lucky enough to have a compatible device, tap 'Install' to download and install it.



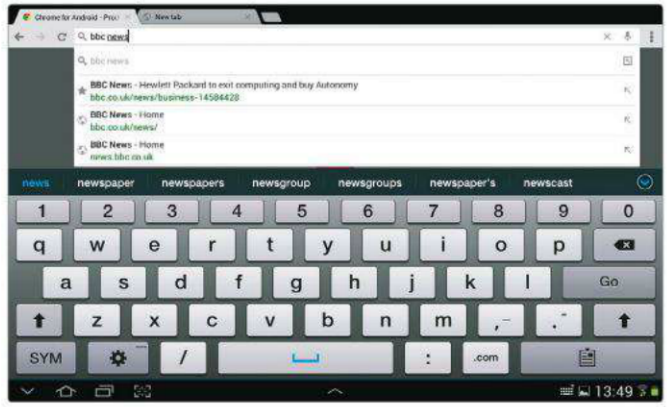
2 Sign in

Next, tap 'Open' and Chrome loads up on your Android device. It asks you to sign in so that all your tabs and bookmarks from your other devices that are running Chrome are imported. Tap 'Sign in' and it should link up automatically, although you may have to enter your Google account details.



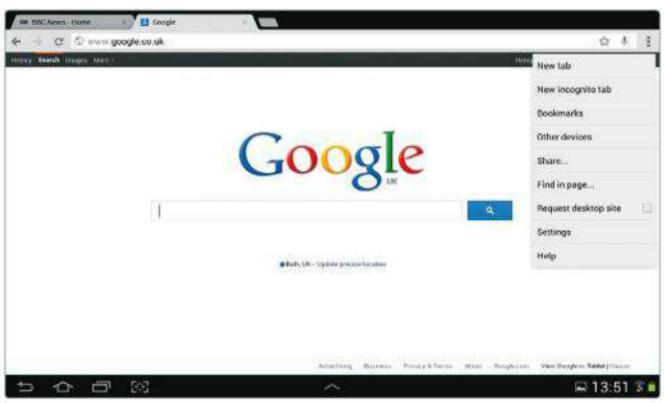
3 Take a tour

You can pick up the basics of Chrome by tapping 'Take a tour'. This guides you through the essentials of Chrome, such as using search, and opening and moving tabs. Swipe to the left to go through the tour. When you've finished, try typing a search term at the top – but don't press 'Enter'.



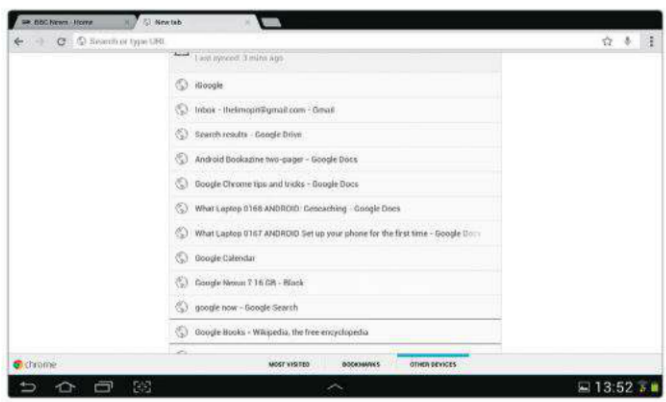
4 Instantaneous

Google scours the internet for sites related to your query, and they then appear in the drop-down menu, which saves you the rigmarole of going to Google's results page. Simply tap on a result to open it. You can also long-press on links within pages to open them up in new tabs.



5 Tab hunter

Tabs appear across the top of Chrome as they're opened, and you can switch between them with a tap. Long-press and drag to rearrange the tabs, and tap the 'X' to the right to close them. On smaller Android devices, you can access the tabs via the icon in the upper-right corner.



6 Other devices

Google automatically syncs Chrome with your other devices. Tap the 'Menu' icon and choose 'Other devices' to see a list of all your Chrome gizmos, then scroll down to see which pages you've had open. At the bottom you can switch to your bookmarks, which are sorted into folders such as 'Desktop Bookmarks' and 'Mobile Bookmarks'.

7 Go incognito

Incognito browsing doesn't save your searches or history, which is great for buying secret gifts and – ahem – other stuff. Tap the 'Menu' icon and choose 'New incognito tab' to bring this up. You can tell that you're using incognito mode by the spy icon that appears in the upper-left corner of Chrome.

8 Chrome plated

You've now mastered Google Chrome, and you know how to use tabs, look at websites from other devices, and open incognito browsing windows. It's a good idea to simply play around with Chrome to get the hang of it, and it will quickly become a seamless part of your internet experience. ■

MOTOROLA
Google
11:35
Wed, 12 Dec
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100%
10° H 11°
L 3°
London
Gmail
Browser
Messages
Camera

T3 Presents

Get more from Android

Google Now guide Pt5 48
Enjoy your whole life at your fingertips with Google Now

Master Google Maps Pt5 52
All the new features of the indispensable Google Maps

Put tunes in the cloud Pt5 54
Use Amazon's MP3 app to hear your music anywhere

Get the news first Pt5 56
Stay ahead of breaking news with the new Google Currents service

Take stunning pictures Pt5 60
Add amazing after effects with Camera Zoom FX

Win any pub quiz Pt5 62
Get the answer to any burning question with Quora

Explore the YouTube app Pt5 64
Enjoy the best of YouTube with the bespoke Android app

Secure your device Pt5 66
Essential guide to protecting your Android device from thieves

Go on a treasure hunt Pt5 70
Play Munzees, the real-world game you play with your phone

All-day battery guide Pt5 72
Make your Android device last all day with these top tips

Power up your tunes Pt5 74
The ultimate guide to mobile music services on Android

Find the best movies Pt5 76
Stay entertained with our pick of the best services for films and TV

HOW TO
HACK YOUR LIFE WITH TECH

STAY ON TOP OF THINGS WITH GOOGLE NOW

Google's Now service provides a wealth of useful information on your Android device, and tailors itself around you

{AT A GLANCE}
SKILL
Straightforward
TIME NEEDED
20 mins
SUITABLE FOR
Android 4.1+

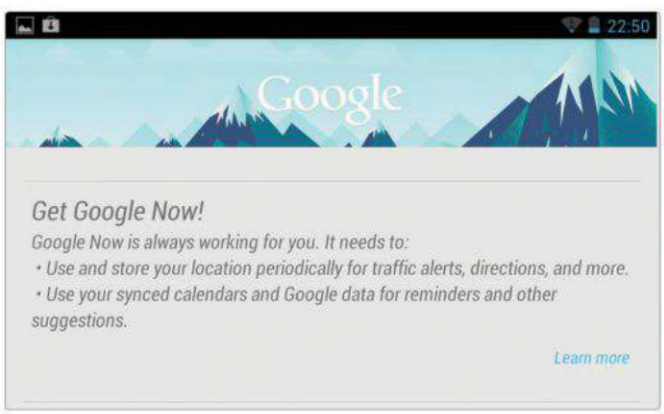
Google Now is Android's take on Apple's Siri, the voice-powered search engine that understands human speech and delivers nearly instantaneous spoken results. But while the voice search is a big part of Google Now, it actually goes one step further and learns your day-to-day movements and web searches so it can deliver results it thinks will be useful to you.

While it may sound hideously intrusive, it's actually rather beneficial. Upon waking it looks at traffic and figures out the best route for you to get to work. If you go travelling, it works out where in the world you are and delivers currency and translation options. It's all powered by Google's own search engine, and the best time to start using it is – appropriately enough – now.

USE GOOGLE NOW

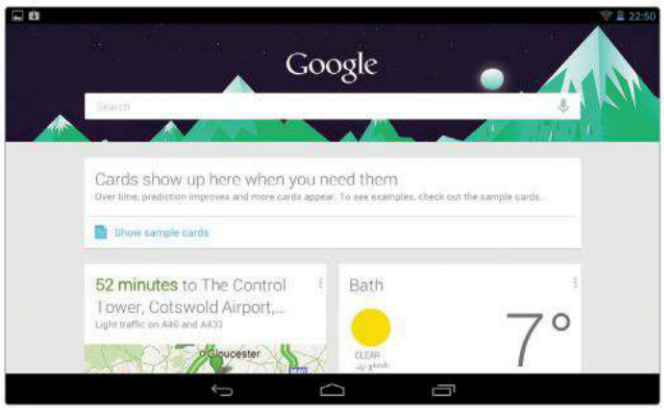
1 Get it Now

At the time of writing, Google Now is only available on devices that are running Android 4.1 or above. To access it on your device, you need to slide upwards from the home icon, or slide the unlock symbol upwards. You can also get to Now by tapping the 'Google' icon in your Apps folder.



2 Getting started

Start Google Now and tap 'Next' to see examples of how it can help you plan your commute, or get up-to-date information about flights. It then checks with you that it's all right for it to use certain pieces of information, such as your location and calendars. Tap 'Yes, I'm in' to get started.

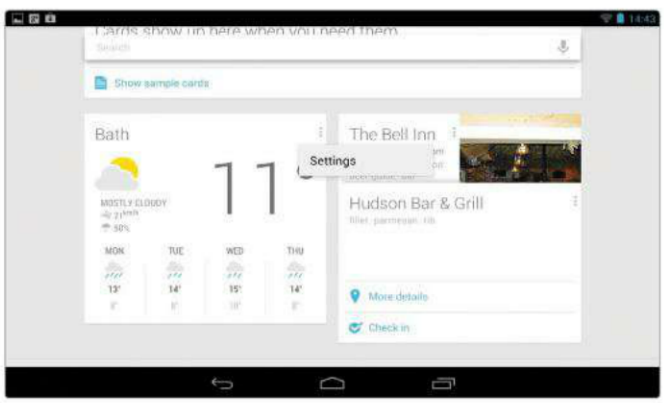


3 Hidden cards

To start with, you'll see a few cards on the Now page. These are dependent on how often you use Google for directions and searches, but you should see some relevant results here – more appear over time. Tap a card to see relevant results, or swipe horizontally to remove it if you don't want it.

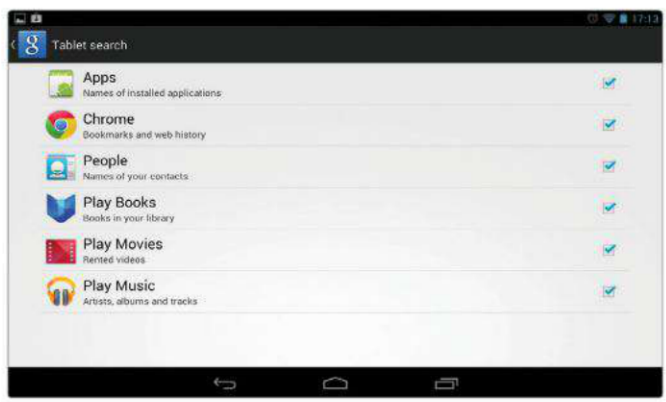
4 Card business

Tap 'Show more cards' and you should see a few more, maybe showing local restaurants and pubs, for example. If there's more than one card in any one category, you can switch between them simply by tapping the top of each one. The more you use Google Now, the more cards you will see.



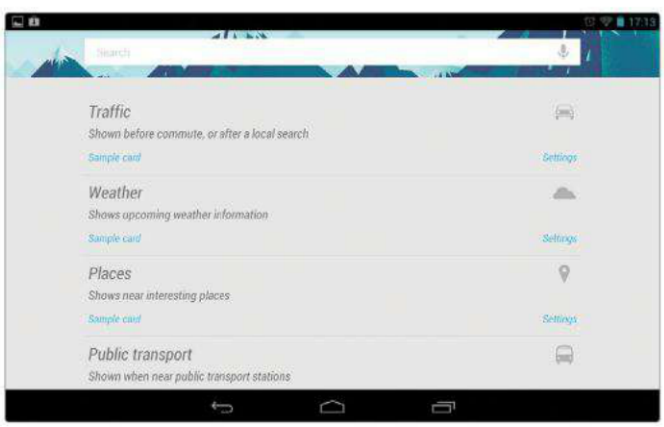
5 Settings

Each card has a settings icon comprised of three vertical dots. Tapping on this enables you to set the 'Notifications' applicable to each card. 'Standard' means that new notifications appear to the top, accompanied by a ringtone or vibration; 'Low priority' places them to the bottom without any alerts; and 'Off' switches them off altogether.



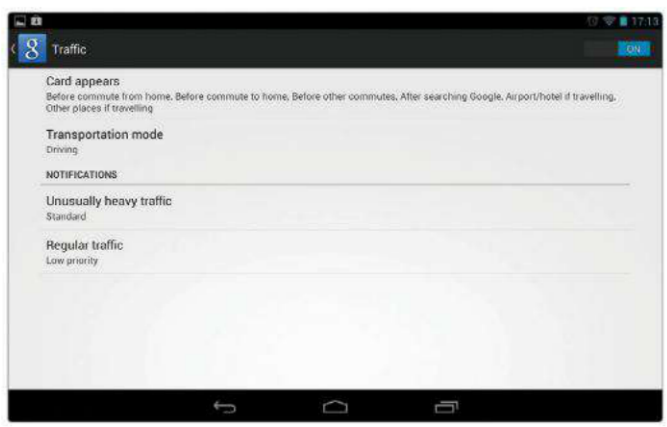
6 Ideal standards

At the bottom-right you'll find another settings icon. Tap on this to see more sample cards, refresh Now and get new cards, and send feedback to Google. Tap 'Settings' and you're able to set up Voice so you can talk to Now. 'Tablet search' enables you to choose which apps on your tablet Now can search – make sure these are all checked.



7 Sampling the wares

At the top of Google Now, tap 'Show sample cards' and you will see a list of all the categories of cards that are available on the service. Tap 'Sample card' to see an example card for each category. Some of these may be tailored to your personal location or history, such as 'Traffic' or 'Places'.

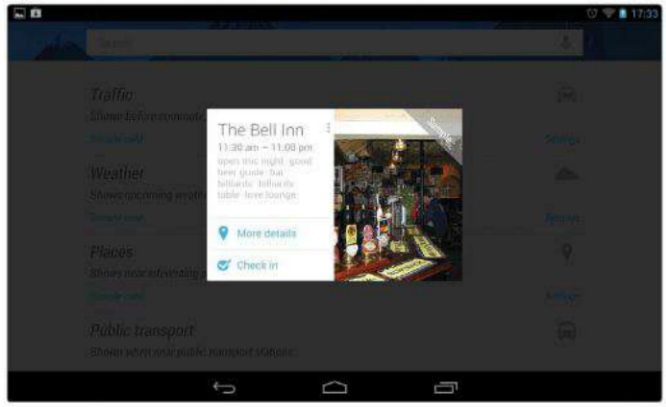


8 Setting the cards

You'll find a 'Settings' link to the right of each category, with unique settings for each card. 'Traffic' monitors where you go on a regular basis, as well as recent Google searches for places. You can choose which journeys have cards here, and switch to public transport if you don't have a car.

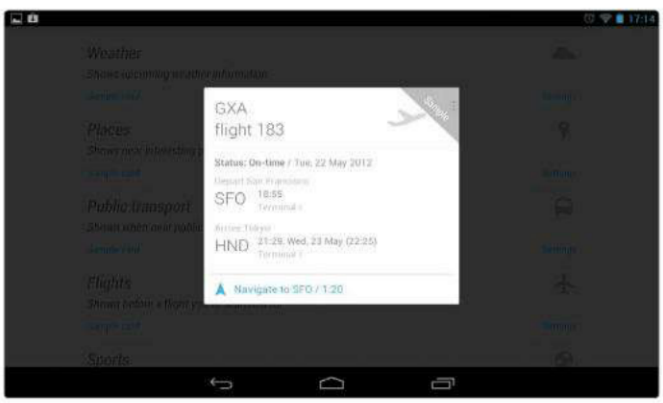
9 Weather

The weather app is particularly handy if you want to see the outlook for the day. In the settings, you can choose to set the card to appear in the morning, in the evening, or always. Now's weather sets itself to your current location, but you can change this to your home or work if you prefer.



10 Places

Places highlights nearby restaurants, pubs and facilities. Tapping 'More details' brings up a place's location and relevant reviews in Google Maps. 'Check in' enables you to publish your location to Google Plus. In the Places settings you can choose to see cards for 'Places nearby if travelling', which is handy if you're on holiday.

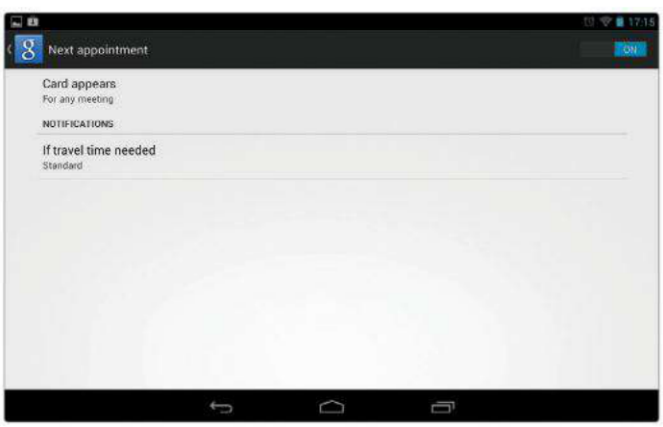


11 Public transport and flights

Google's immense catalogue of data includes public transport, and Now automatically brings up timetables and schedules when you're near bus and train stations, and even works out connections while you're travelling. Flights works similarly, flagging up departure times for flights you've Googled in the past.

12 Sports

You can follow your favourite sports teams on Now, too, and you can choose whether a card appears before, during or after a match. Tap 'Edit teams' and then 'Add teams', and you'll be able to search for and add clubs you support. It's immensely handy if you can't make it to the pub to watch a match.

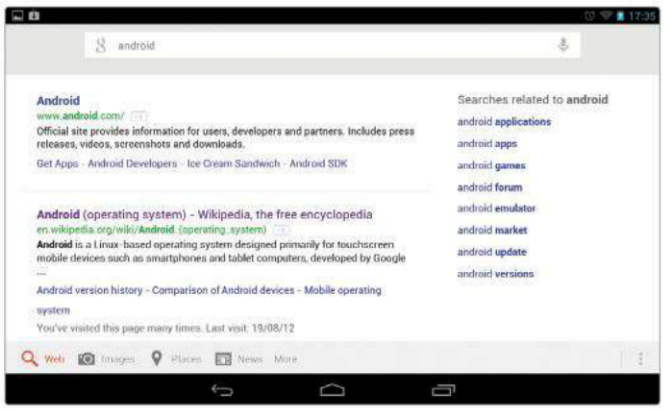


13 Appointments

Any entries and appointments you've got in your Google Calendar automatically show up here. Enter a location in the calendar and Now gives you directions and even uses traffic information to give you enough time to get there. It's hugely handy, and it means you'll never be late for anything again.

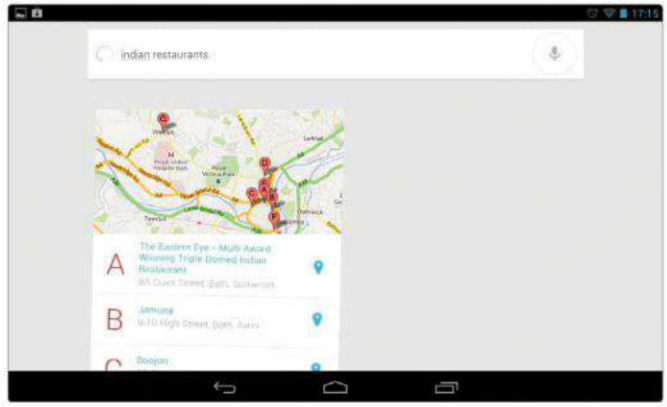
14 Travel

'Translation', 'Currency' and 'Time back home' are all useful to globe-trotters, offering automatic options for each. Being able to quickly translate words and phrases is handy, and 'Time back home' is great for planning late-night chats with folk back home. 'Currency' uses the latest exchange rate to ensure you don't spend too much.



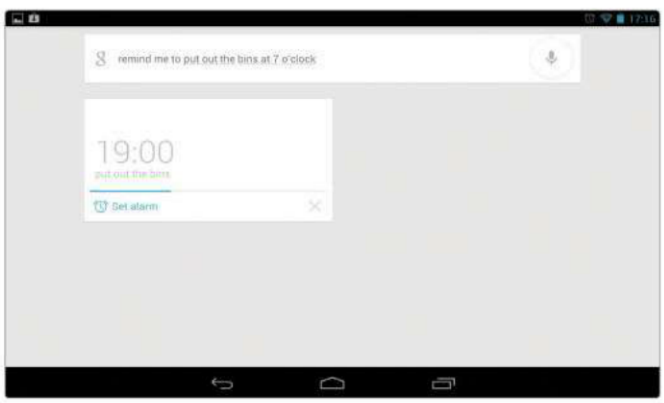
15 Search cards

Search is the bread and butter of Google Now, and the more you search, the better and more accurate the results become. You'll find a search bar at the top of Now, and you can enter words or phrases here to find relevant information both on the web and within your Android device's apps.



16 Voice search

Now also includes voice search, which is accessible by tapping the microphone icon to the right of the search bar. It works best when you search for things nearby, so saying "Indian restaurant" or "Leisure centre" brings up results on a map. Other results are presented from Google's conventional search.

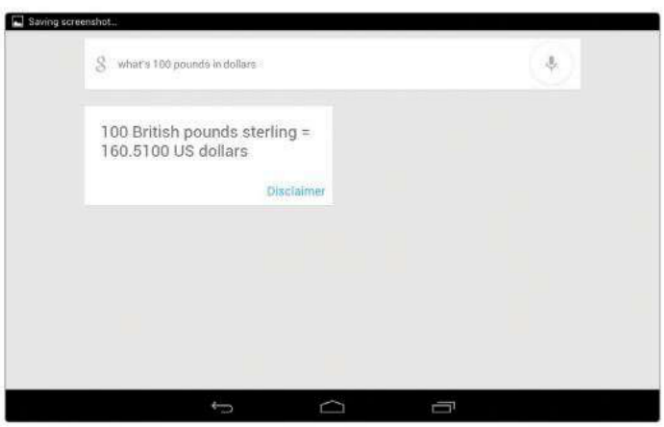


17 More voices

Where Now gets really cool is in its ability to recognise and act upon certain phrases and words. Say "Remind me to cook at six o'clock," for example, and Now automatically gives you a reminder. If you're using it on a phone, you can say "Call Andrew," and you'll be put through to the dialling screen.

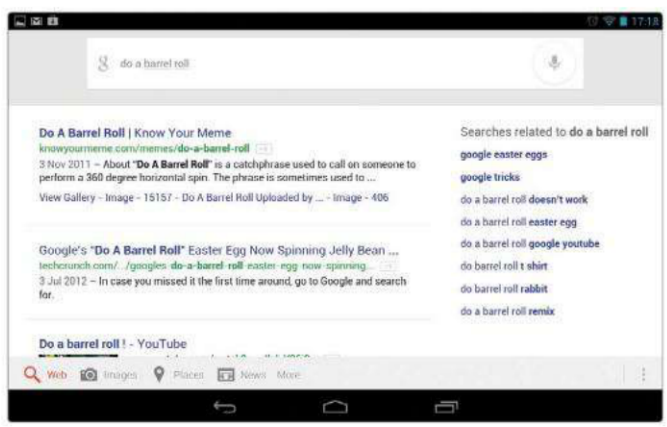
18 Word search

You can also use spoken queries and Now 'talks' the results back to you. Try asking "Who founded Google?" for instance, and it will respond by telling you that "Google was founded by Larry Page and Sergey Brin." You can also search for movie casts, word definitions, authors and capital cities.



19 Number games

Times and conversions can also be used in Now. Asking "What's £100 in dollars?" will result in Now speaking the conversion back to you, while asking for "nine per cent of 365" will give you the correct result. "What time is it in Rome?" will tell you the local time there, and you can also search for sunrises and sunsets.



20 The time is Now

Following this tutorial should have given you a complete overview of how Google Now can be used on a day-to-day basis, and how to set up each category to your liking. You're also privy to a number of tips and tricks that make it more fun and useful. And don't forget that the more you use it, the better the results will be. ■

HOW TO
HACK YOUR LIFE WITH TECH

MAKE THE MOST OF GOOGLE MAPS' NEW FEATURES

Google Maps is utterly indispensable, and it's just got loads better with the addition of funky features such as Local and Offline

{AT A GLANCE}
SKILL
Anyone can do it
TIME NEEDED
10 mins
SUITABLE FOR
Android

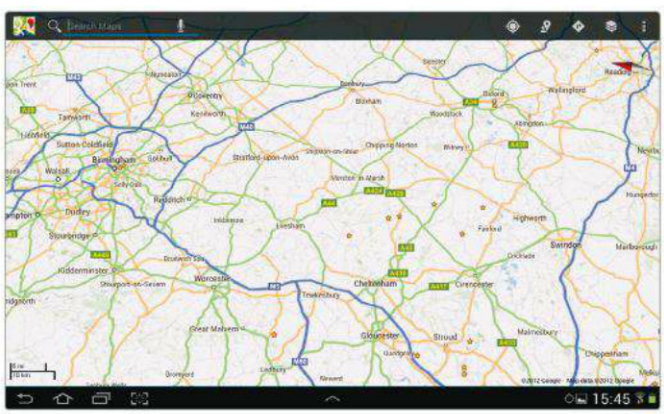
We can't even begin to think how many Android devices have been sold off the back of Google Maps, but we'd imagine it's an awful lot. Google's polished location and navigation app has become an **essential part of any Android smartphone or tablet, and Apple's recent failure to emulate it simply highlights how good it is.**

We don't cover many of the basics here because most people already know how to use them. Instead, we're concentrating on Google Maps' latest and greatest features. For example, maps can now be stored on your device for when you're abroad and without a mobile signal. It's worth remembering that your device's GPS will still function in these situations, too, so you'll never get lost again.

MAKE THE MOST OF MAPS

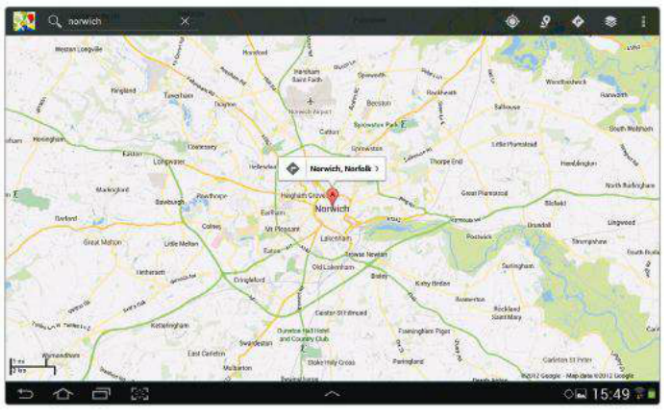
1 Get mapping

Google Maps comes pre-installed on most Android devices, but if you don't already have it, search the Play Store for 'Maps', and download and install it. It's a good idea to turn on GPS for this tutorial, too – you'll find this under 'Location services' or 'Location & security' in your device's settings.



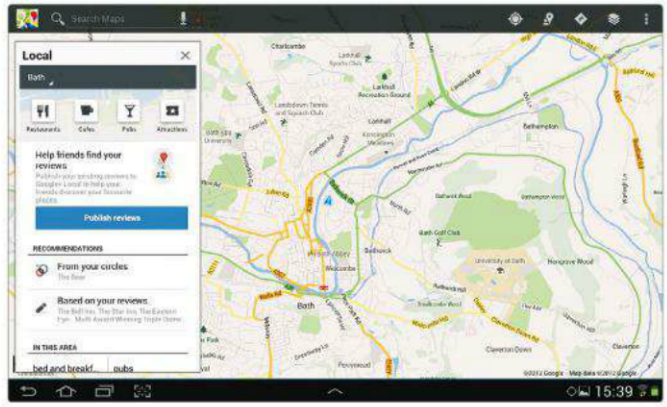
2 The basics

Google Maps is incredibly simple to use. Move two fingers together or apart to zoom out and in, or rotate them to turn the map. You can also tilt the map by sliding two fingers downwards. Tap the circular icon to the upper-right when you want to return the map's view to your current location.



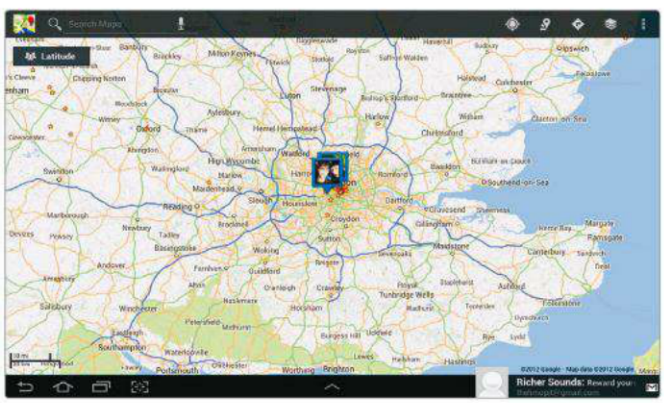
3 Search

Use the text box to the upper-left to search Google Maps for places, things and postcodes. Google Maps bases your searches around the area you're currently viewing on the screen, which is handy if you're planning a trip somewhere. You can also get directions by tapping a result and then tapping the directional arrow.



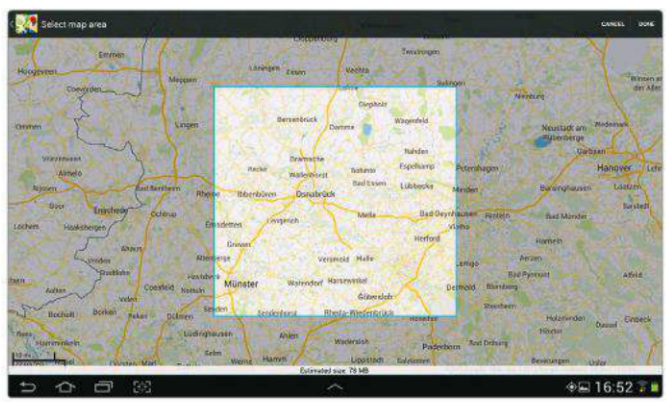
4 Localisation

A recent addition to Google Maps is Local. This lists local attractions and places, such as restaurants, and ranks them according to reviews and distance. You can access Local by either tapping the 'Maps' icon to the upper-left on phones, or tapping the 'Man' icon to the upper-right on tablets.



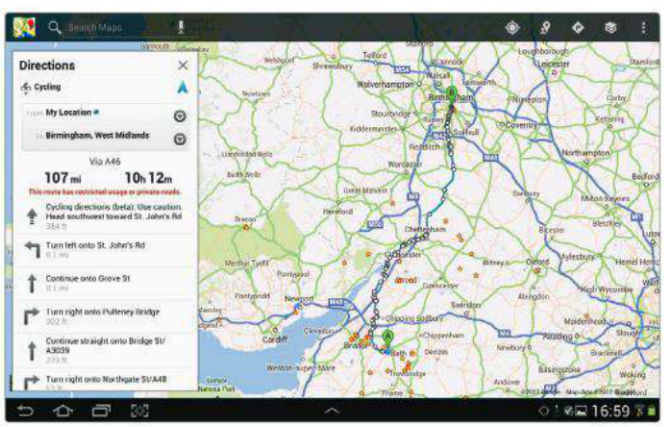
5 Latitude

Latitude shows the locations of Google contacts who also have the feature enabled. Tap the layers icon, then choose 'Latitude' to sign in. You'll be asked to enable Latitude, and then you'll be able to see where your friends are. Tap the 'Menu' icon then 'Add friends' to get them on Latitude.



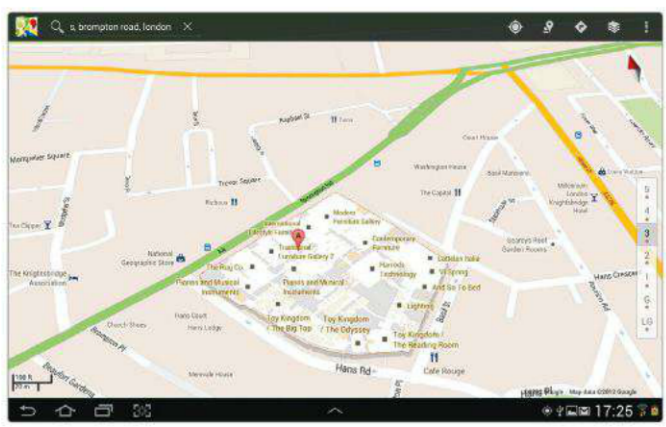
6 Offline

You can download bits of Google Maps for when you're offline. Tap the 'Menu' icon, then 'Make available offline'. The map is overlayed with a square – this is the area Google Maps downloads. Pan and zoom the map until the area you need is highlighted, but don't zoom out too far as the map will be too big to download. When ready, tap 'Done'.



7 Bicycle directions

A handy new addition for cyclists is biking directions, developed with transport charity Sustrans. Choose a destination, then tap the navigation arrow and choose the 'Bicycle' icon followed by 'Go'. Bear in mind that cycling directions are currently in beta, so they may point you in some rather odd directions.



8 Navigator

Well done – you now know how to use Google Maps, explore the area around you, find your friends on Latitude, and save maps for offline use. A final cool feature is that you can view 3D versions of certain buildings and even see what's on each floor – try searching for 'Harrods', for instance. ■

HOW TO
HACK YOUR LIFE WITH TECH

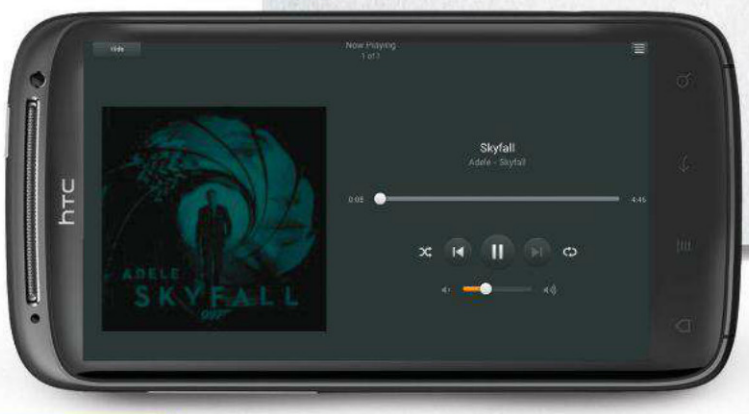
LISTEN TO YOUR MUSIC COLLECTION FROM THE CLOUD

Amazon's MP3 app has a handy new feature which enables you to listen to your music collection wherever you go

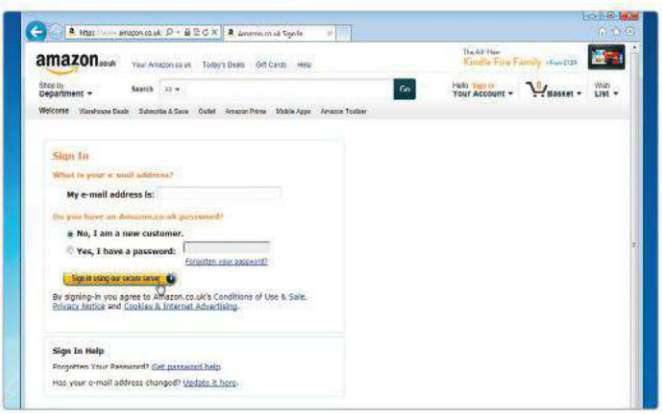
{AT A GLANCE}
SKILL
Straightforward
TIME NEEDED
15 mins
SUITABLE FOR
Android, Windows or Mac computer required

Android phones and tablets are amazingly capable little multimedia powerhouses, especially when it comes to playing music. But there's still a digital divide when it comes to getting a huge collection of songs from your computer to the device, especially given the fiddly nature of connecting cables and syncing files.

Fortunately, Amazon's MP3 app makes this process a lot easier. You need to install a small piece of software on your computer, which uploads copies of your music files to the internet. From here you can access and download the files on your Android device, with the added bonus that your music is always backed up on the internet. We're starting this tutorial on a computer, so make sure yours is ready to go.

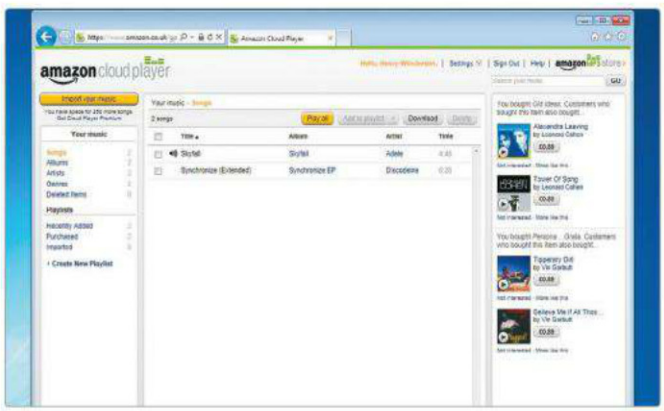


USE AMAZON'S CLOUD PLAYER



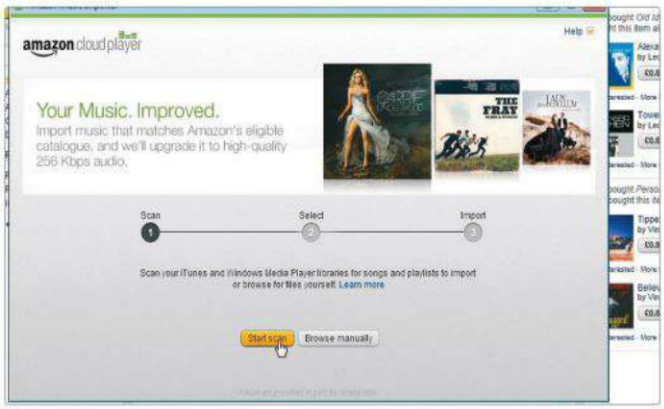
1 Amazon grace

On your computer, open Internet Explorer or Firefox (the Cloud Player doesn't work with Chrome) and go to www.amazon.co.uk/cloudplayer. You may be asked to log in to Amazon at this point – if you don't already have an account, click 'No, I am a new customer', followed by 'Sign in...' to create one.



2 Outlook: cloudy

You're now presented with Amazon's Cloud Player. Any songs you've previously bought via Amazon are displayed here, and you can play them from within your browser. You can access this page from any computer, making it ideal for listening to music while you're at work – if you're allowed, of course.



3 Rare imports

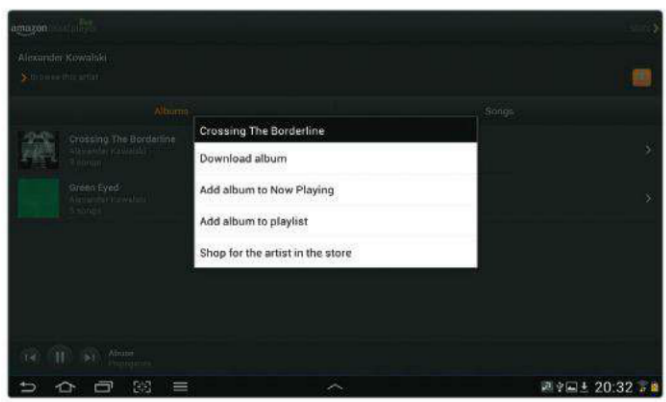
Next, click 'Import your music' and you're prompted to get the Amazon Music Importer. Click 'Download Now' followed by 'Run', then click 'Continue' once it's loaded up. Click 'Authorise Device' to enable Amazon Music Importer on your computer. Click 'Start scan' to search your computer for music files.

4 To the cloud

If you have more than 250 music files on your computer, click 'Select music' and click the checkboxes next to your favourite artists, then click 'Import selected'. If you have fewer than 250, simply click 'Import all'. It may take a while, so you might as well fire up your Android device as it's happening.

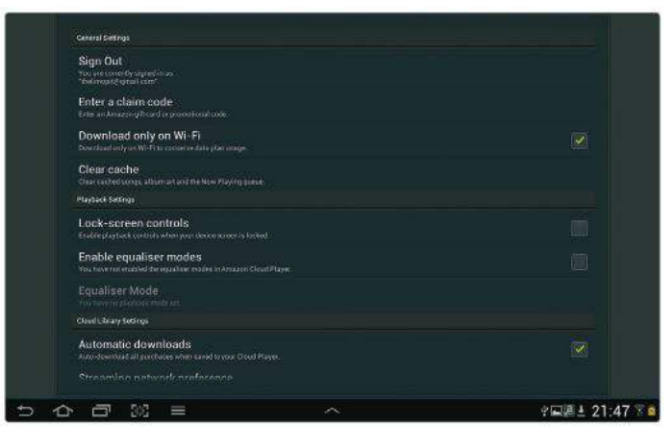
5 Amazon MP3

Open Google Play and search for 'Amazon MP3'. Tap 'Install' to download it, then 'Open'. Next, tap 'Player'. Choose 'Sign in to Amazon', then enter the email address and password you used in step one. When the Cloud Player starts, you should find all the music you've imported from your computer.



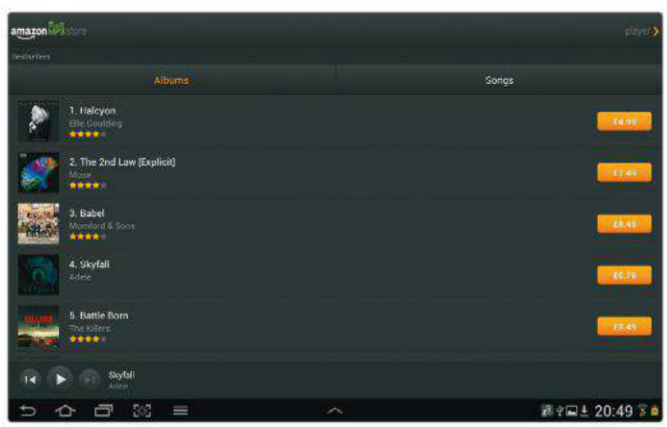
6 Easy listening

You can tap on each artist's entry to see songs on your device, then tap a song to play it. By default Amazon MP3 streams your music, which can rack up large data bills. To make music available offline, long-press on an artist, then choose 'Download all songs by artist'. You can also tap the orange download icon to put the music on your device.



7 Data allowance

It's also a good idea to set Amazon MP3 to only download music over Wi-Fi – this means it won't attempt to download music when you're on a mobile data connection. Tap the menu icon, then 'Settings' and check 'Download only on Wi-Fi'. You can also set 'Automatic downloads' here, so new music is imported immediately.



8 Music to your ears

You should now be able to access some of your favourite songs via your Android device, and you know how to add music from your computer to the Amazon cloud. Don't forget that you can buy music via the Amazon MP3 app, too, and anything that you purchase is automatically added to the cloud. ■

HOW TO
HACK YOUR LIFE WITH TECH

USE GOOGLE CURRENTS TO STAY UP-TO-DATE WITH NEWS

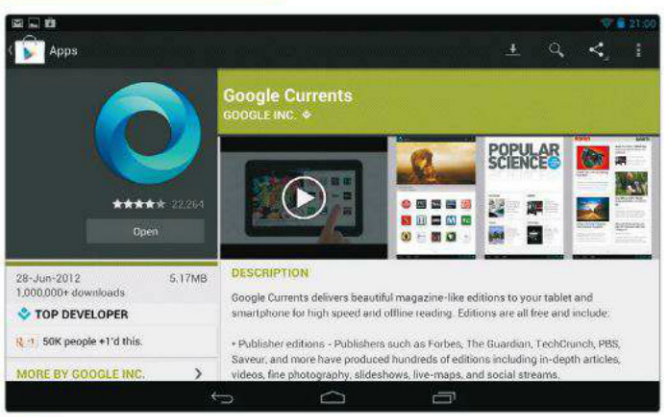
Google Currents is a one-stop shop for breaking news stories and favourite blogs. It's easy to set up to your personal tastes, too

{AT A GLANCE}
SKILL
Tricky in parts
TIME NEEDED
20 mins
SUITABLE FOR
Android

The internet has revolutionised the way we receive news updates, and thanks to mobile phones, we can stay up-to-date with the latest stories as they break. Sources such as BBC News and The Guardian are regularly updated, but keeping an eye on news sites can be a bit of a faff, especially if you're browsing on a mobile phone.

Google's Currents brings lots of disparate sources together in one place, and formats them for easy reading on mobile devices. It's incredibly customisable, too, and you can add everything from popular news stories to your favourite esoteric blog. It also saves the content of news stories so you can read them when you're offline, which is handy if you're on a limited data contract or a Wi-Fi-only tablet.

GET STARTED WITH CURRENTS

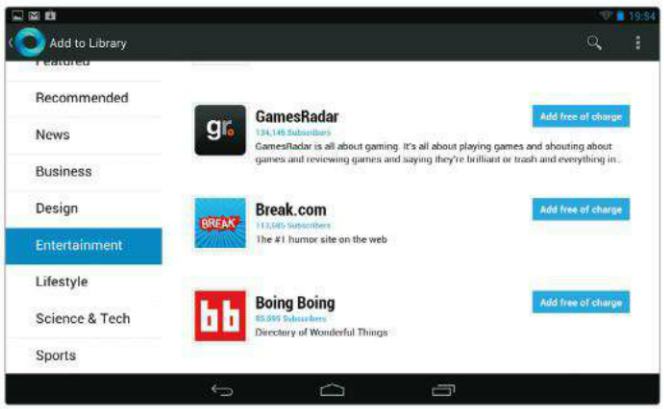


1 Find Currents

Google Currents comes pre-installed on many new Android devices. If it's not already on yours, search the Play Store for 'Currents', then tap 'Install' followed by 'Accept and install'. Find it in your apps and open it. You'll notice that Currents has two panels, and this design is present throughout.

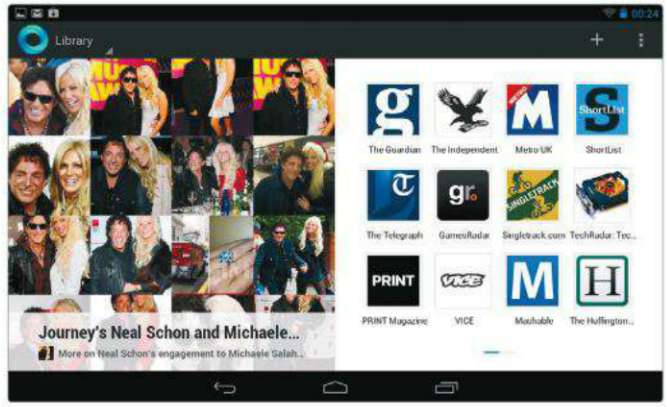
2 Panel show

At Currents' homepage, the panel to the left (or top in portrait mode) shows new and important news stories, and swiping enables you to browse stories from numerous sources. The right (or bottom) panel shows a list of all the current news sources, such as The Guardian, The Independent and Now Magazine.



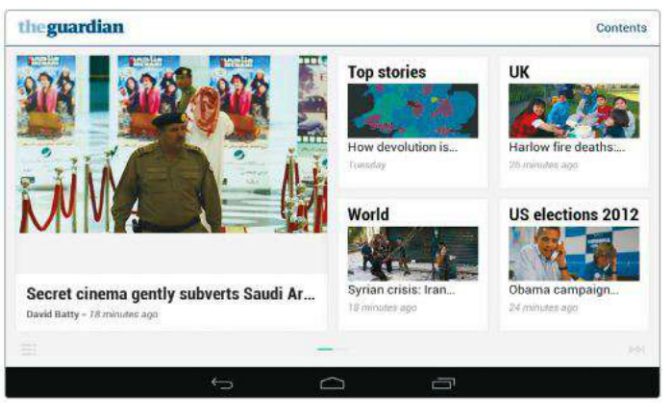
3 New news

Tap the plus symbol in the upper-right corner or the 'Add more' icon to add sources to Currents. Browse through the various categories until you find one that interests you, then tap it and scroll through the list of sources. Tap 'Add free of charge' to add particular sources to your Currents library.



4 Limitless

There's no limit to the number of sources you add to your library, and adding loads makes for an interesting and diverse news feed. Return to your homepage and you will see the newly added icons. Tap on one of these and you are taken straight to the news source's main Currents page.



5 Feel the current

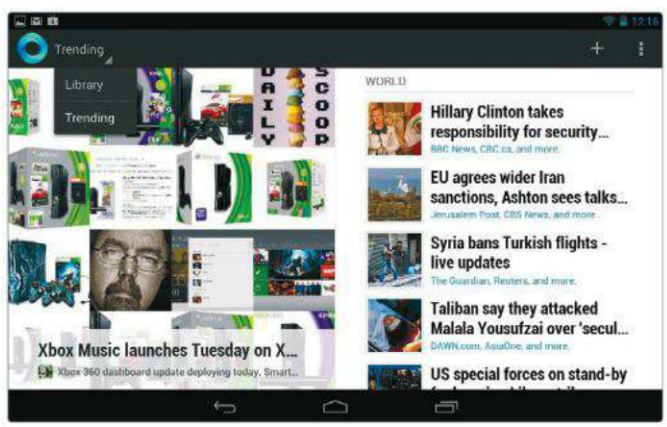
Currents pages vary, but generally you'll find a big news story, a few smaller ones and top stories from each of the news source's sections. Tapping on a story takes you straight to it, whereas tapping on a section gives you an overview of everything related to it. Swipe horizontally to see more.

6 Keen reader

When a story's open, you can swipe to the left to read it in a mobile-friendly layout. Tap images to view full-size, and tap videos to watch them. Tapping at the top when viewing a story reveals a 'share' icon, which enables you to send stories to contacts. The settings icon enables you alter the text size.

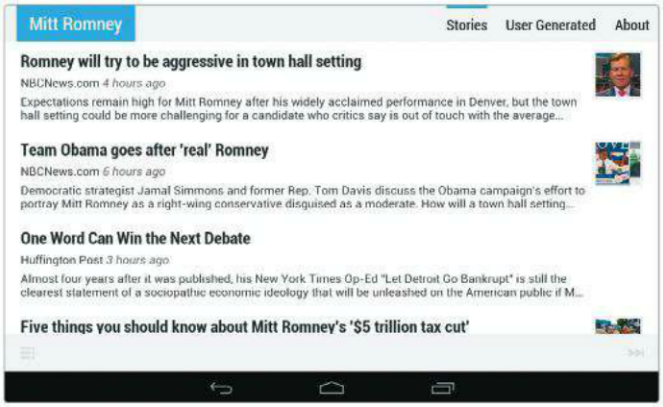
7 Offline sync

Syncing Currents means that you can read stories offline, which is a definite boon if you're on a Wi-Fi-only tablet. Tap the 'Menu' icon followed by 'Sync now' to get everything up to date. Tap 'Settings' within the menu to choose whether or not to download images as well for offline viewing.



8 Trending stories

Trends are current news stories that have attracted a lot of media interest. You can find them by tapping 'Library' on the Currents homepage and then switching it to 'Trending'. You will see a list of the top stories; simply tap one of these to go to a list of all the sources for that story.

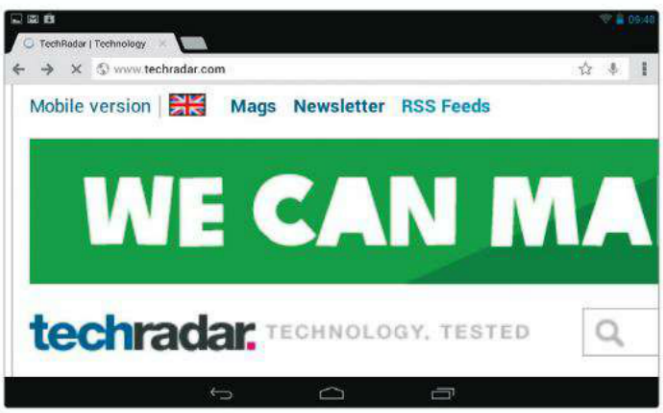


9 Contents page

To the upper-right of this page you'll see 'Stories', which have been published in the media; 'User Generated', which are non-professional content and videos; and 'About', which searches the internet for more information on a topic. Tapping on stories and content takes you to the relevant web page or video.

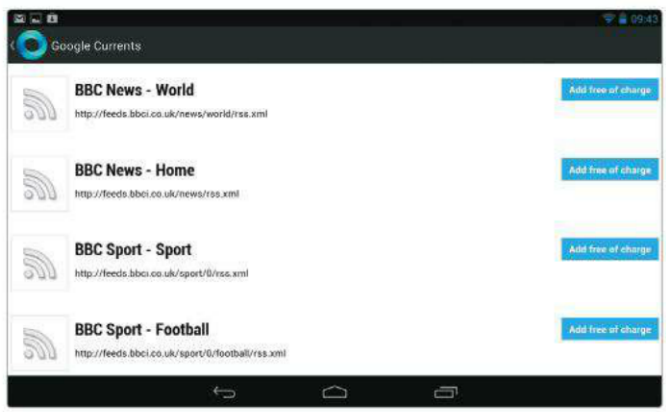
10 Manage trending

You can add more trends from Currents' homescreen by tapping the plus symbol or 'Add More Trends'. Here you'll find lots of categories, such as 'Entertainment' or 'Sport', which can be added to the trending section of Currents. Don't forget that you can switch back to your library at any time, too.



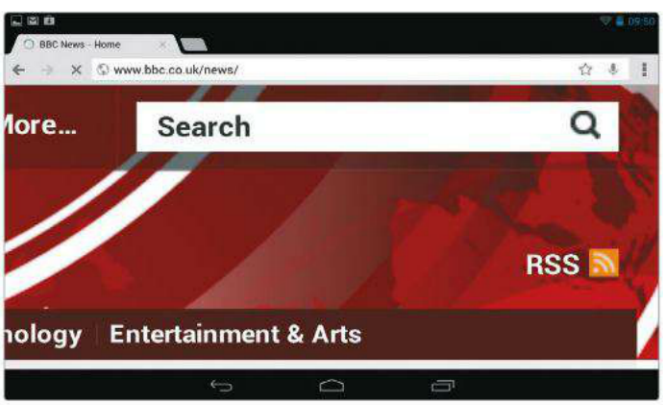
11 RSS feeds

If there's a particular site or blog you follow that you can't find in Currents, you can still add it – provided it has an RSS feed. Standing for Really Simple Syndication, it's the 21st century equivalent of ticker-tape, providing a regularly-updated stream of content, which can be formatted to fit Currents.



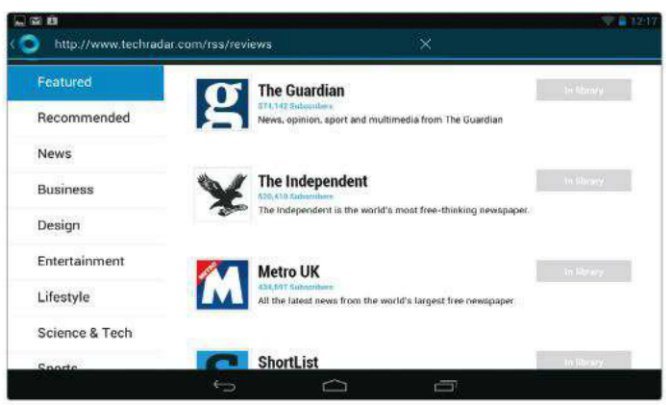
12 Searching

From the Currents homescreen, switch to the Library view using the menu to the upper-left. Tap the plus symbol or the 'Add more' link, and then tap the search magnifying glass to the upper-right. You can search for keywords ('BBC', for example) and you will see a list of related RSS feeds.



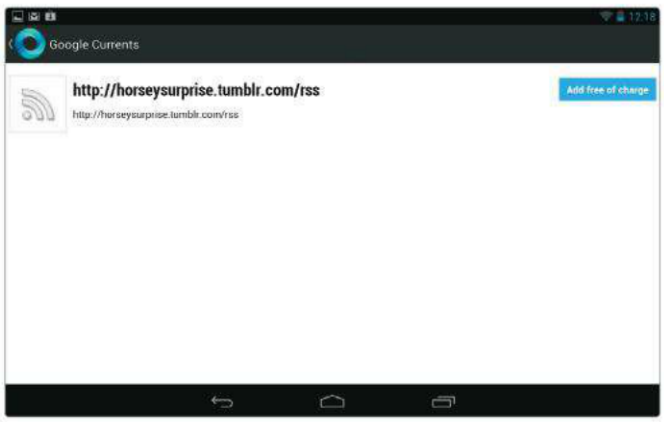
13 Searching

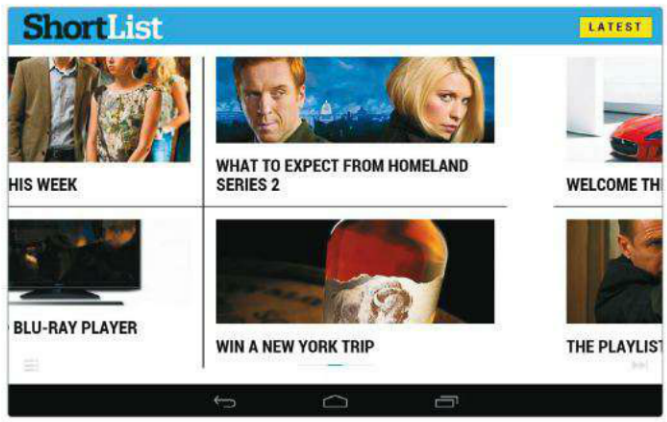
Tap 'Add free of charge' to include relevant RSS feeds in Currents. If you can't find an RSS feed here, you can add one manually. You'll need to fire up your web browser and visit the relevant website, then find its RSS feed – this will generally be towards the top or bottom of the site's homepage.



14 Copy and paste

Long-press on the RSS feed link, and then choose 'Copy link address'. Now open Currents again, tap 'Add more' and then the 'Search' icon. Long-press on the search bar and choose 'Paste'. Tap 'Go' and then 'Add free of charge' to the right, then press 'Back' and you'll see the new feed in your Currents homepage.





15 Add RSS feeds

You can add more feeds – such as Tumblr blogs and Facebook updates, for example – using this method. Usually they are already formatted for Currents and available to read offline, but occasionally you'll have to tap 'See original article' to go to the website's page in your web browser.

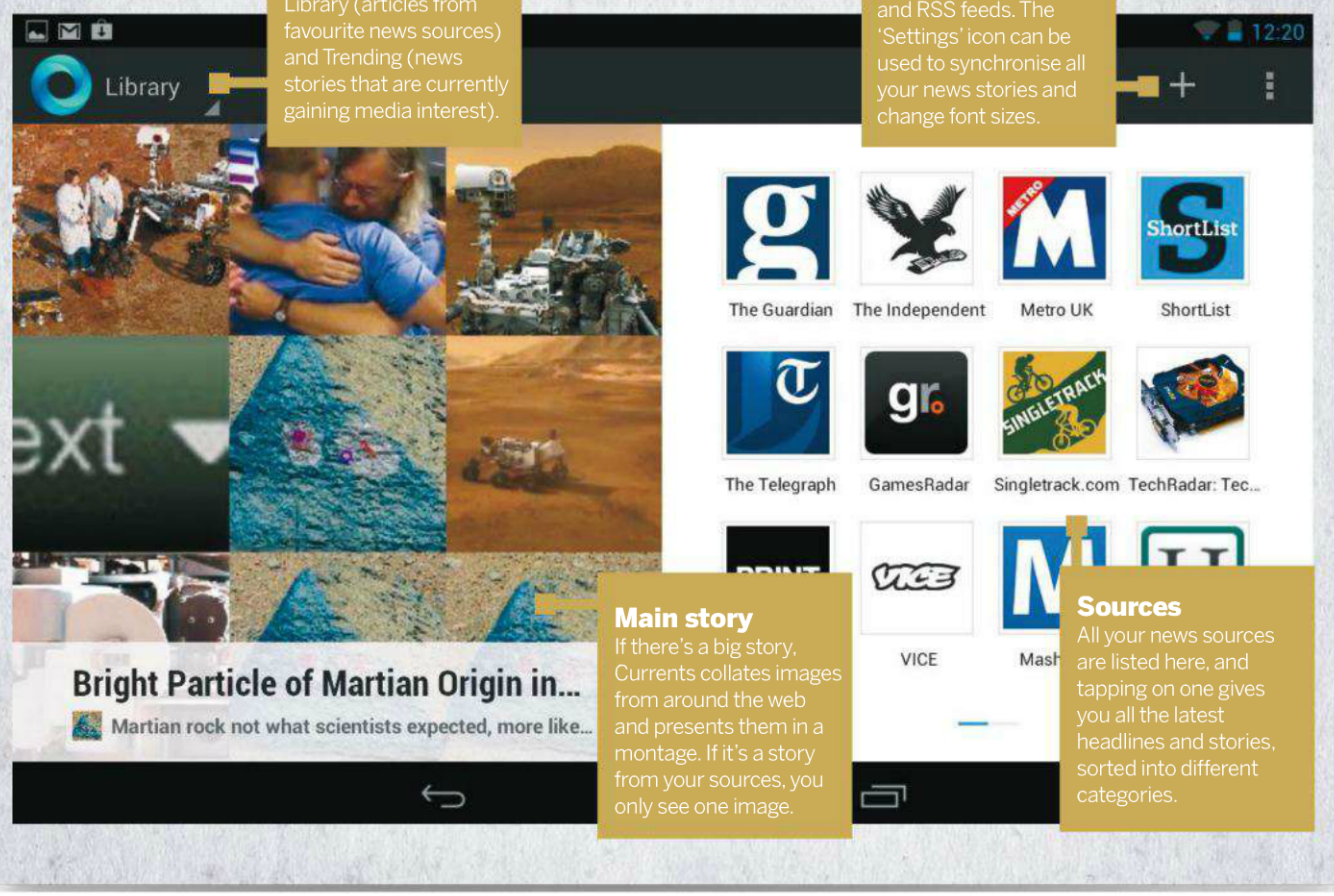
16 Strong Currents

You've now set up Google Currents to your individual news tastes, discovered trending stories, and added RSS feeds from other websites – well done! Remember that you can use Currents offline, and that the news sources are regularly updated, so you can always stay on top of things. ■

Current affairs

Library
Tapping here lets you switch between your Library (articles from favourite news sources) and Trending (news stories that are currently gaining media interest).

Settings
The plus symbol enables you to add news sources and RSS feeds. The 'Settings' icon can be used to synchronise all your news stories and change font sizes.



Main story
If there's a big story, Currents collates images from around the web and presents them in a montage. If it's a story from your sources, you only see one image.

Sources
All your news sources are listed here, and tapping on one gives you all the latest headlines and stories, sorted into different categories.

HOW TO
HACK YOUR LIFE WITH TECH

USE CAMERA ZOOM FX TO TAKE STUNNING PHOTOS

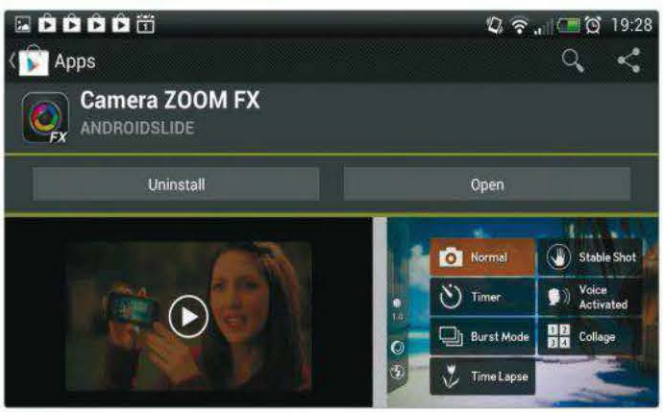
Camera Zoom FX gives you an impressive array of effects and modes so you can take amazing snaps with your Android device

{AT A GLANCE}
SKILL
Straightforward
TIME NEEDED
10 mins
SUITABLE FOR
Android, camera required

Android devices' cameras are becoming ever more powerful, with five and eight-megapixel sensors adorning just about every smartphone and tablet. But while Android's stock camera software is fairly decent, it's completely eclipsed by Camera Zoom FX.

This hugely powerful camera app does just about everything you could want it to do, and a whole lot more besides. It can add Instagram-style retro frames and effects to your images, and it includes an array of settings that you'd normally only find on high-end digital cameras. The results are never less than impressive, too, and you can even create photos of yourself standing next to a celebrity. It is a little fiddly, though, so read on to get to the finer points of Camera Zoom FX.

TAKE JAW-DROPPING PHOTOS

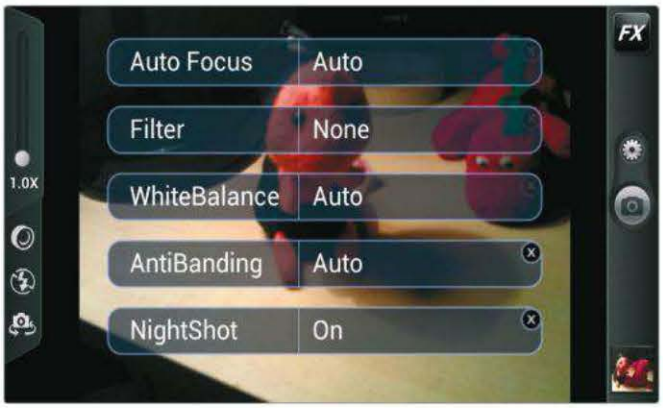


1 Get Camera Zoom FX

Open the Google Play Store and search for 'Camera Zoom FX'. At the time of writing, it costs £1.79, but we think you'll agree that it's worth every penny thanks to its sheer brilliance. Tap 'Accept & buy' to purchase it and agree to the conditions, and then install it on your Android device.

2 Development skills

To take a photograph, either press the camera button to the right of the screen, or tap anywhere on the screen. You can zoom in by dragging the slider to the left upwards. The lens icon below this enables you to set the focus between Auto, Infinity, Normal and Macro (for close-ups).



3 Lenstastic

In this menu you'll also find 'Filter', which enables you to choose cool effects such as Mono and Sepia; 'WhiteBalance', which sets the tone for different types of light; 'AntiBanding' for taking shots of screens and monitors; and 'NightShot' for taking photos when light is at a minimum.

4 A bit flash

The lightning symbol below the lens icon sets the flash to always fire, fire automatically or not fire at all. You can also set it to 'Torch', which means that it's always on and is perfect for lining up darker shots. If you have a front-facing camera, you can switch to this with the icon below.

5 Special FX

To the upper-right of the screen you'll find the 'FX' icon, and this is where Camera Zoom FX's magic lies. Tap the heart symbol, then choose 'Ready Made' to view a selection of retro effects and frames for your photographs. Tap the 'Back' key to return to the camera, and then snap away.

6 Additional apps

Search the Play Store for 'Zoom FX' and you'll also find loads of add-ons, which will appear in the FX section. These are fun, letting you superimpose the Queen into photos, or compositing worn-out effects on your images. You can stack effects by choosing more than one, and Camera Zoom FX keeps a backup of the unprocessed picture, too.

7 More settings

Tap the cog icon above the camera button to access the app's shutter settings. Here you can choose 'Stable Shot', which only takes a photo when the camera isn't shaking, as well as a Time Lapse mode, which takes one photograph every few seconds, resulting in a clever fast-motion movie.

8 Snap decisions

You should now be a seasoned expert in all things Camera Zoom FX. The best way to find your way around the app is to take it outside with you on a sunny day and take lots and lots of photos. You'll find more interesting options by pressing the 'Menu' key followed by 'Settings', too. ■

HOW TO
HACK YOUR LIFE WITH TECH

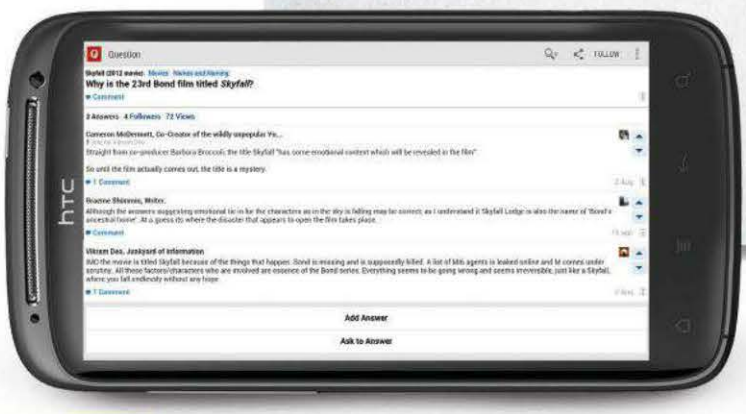
BECOME A KNOW-IT-ALL WITH THE QUORA APP

Quora is a question-and-answer based Android app, and it can find really good answers to really tough questions

{AT A GLANCE}
SKILL
Straightforward
TIME NEEDED
10 mins
SUITABLE FOR
Android

The internet can find the answers to just about every question you can think of, from 'How long should I boil spaghetti for?' to 'What is the meaning of life?' Of course, these answers might not necessarily be the correct ones, and even powerful knowledge bases, such as Google and Wikipedia, can sometimes give you inaccurate or corrupt answers.

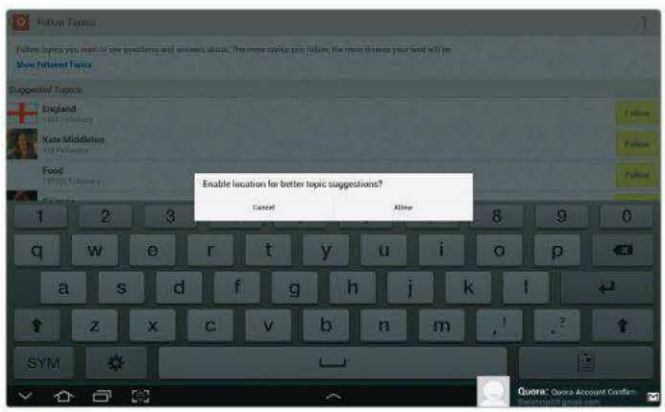
Quora works a little like Wikipedia, but it does things somewhat differently. It asks people who are bona fide experts on certain subjects to contribute answers, which are then voted up or down by the Quora community. Because a user's real name is attached to his or her answers, there is more of a focus on writing truthful responses than creating humorous inaccuracies.



FIND ANSWERS WITH QUORA

1 Get Quora

Open the Play Store and search for 'Quora'. Tap 'Install', and then 'Open' when the process is complete. If you have a Facebook or Twitter account, you can sign into Quora with those; but if not, tap 'I don't have a...' and enter your name, email address and password, then tap 'Create Account'.

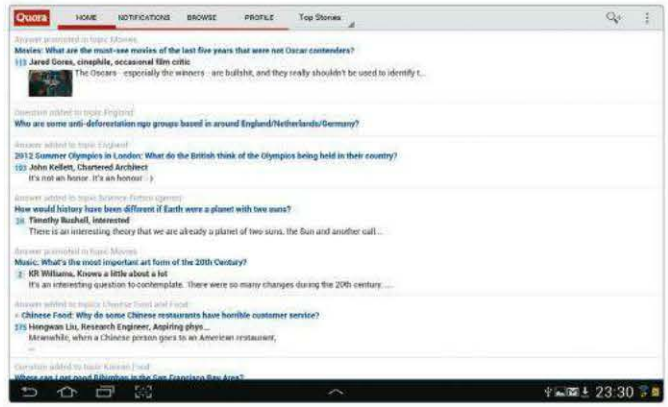


2 Location services

Quora can use your location to find topics that are more relevant to where you live – rest assured that it doesn't use this information for anything else. Tap 'Allow' to let the app know where you are, or just tap 'Cancel' to skip straight to all the topics. Now you'll see a big list of Quora topics on your screen.

3 Topical heat

Find a topic that interests you and then tap 'Follow' to add it to your Quora feed. Each topic you follow adds more relevant ones to the list, so tap 'Follow' on any that you find interesting. The more topics you choose, the more diverse your feed becomes, so make sure that you pick at least five.

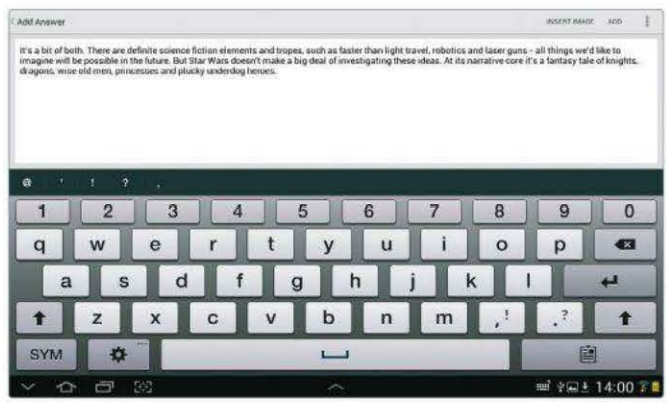


4 Quora home

Now that you've set up some topics, tap the 'Quora' icon to the upper-left of the screen. You're presented with your feed, which includes all the topics you're following. The best way to get started with Quora is simply to browse your feed until you find a question you feel you have some knowledge about.

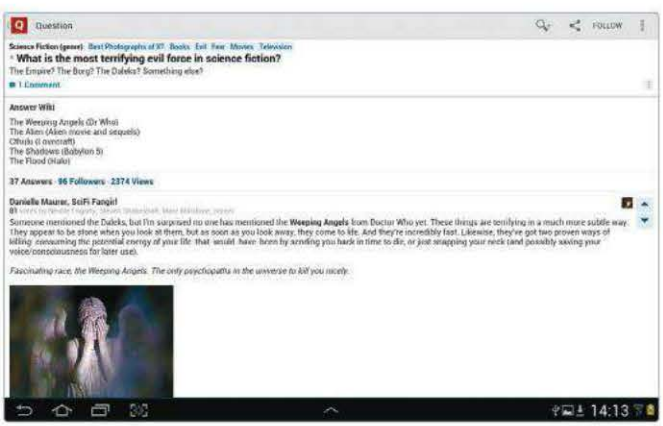
5 Q&A session

You'll notice that better answers get voted to the top in Quora. As you find answers, you can vote up ones you think are good using the arrows to the right, ensuring that the best ones get to the top. Likewise, poorer answers can be downvoted, so people know that they may not be worth reading.



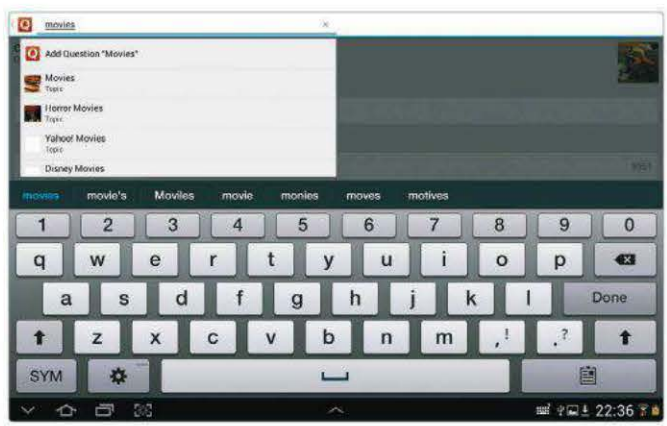
6 Answer me

If you know the answer to one of Quora's questions, you can contribute a reply. Scroll to the bottom of the question page, tap 'Add Answer' and write your reply. Your answer is more likely to be voted up if it's well researched and well written, so check your facts and spelling. You can return to your answer by tapping 'Profile' then 'Answers'.



7 Casual browsing

Of course, you don't need to contribute to Quora to use it, although it is encouraged. The 'Search' button to the upper-right enables you to find answers to tough and interesting questions. It's better to enter a few keywords such as 'curry, best' rather than 'what's the best curry in the world?'



8 Final answer

With Quora you'll be the hero of pub quizzes around the world, and it's entertaining to simply browse and answer other people's questions. Don't forget that you can ask your own questions, too – simply tap the 'Search' icon, input your question and then tap the 'Ask' icon to the left. ■

HOW TO
HACK YOUR LIFE WITH TECH

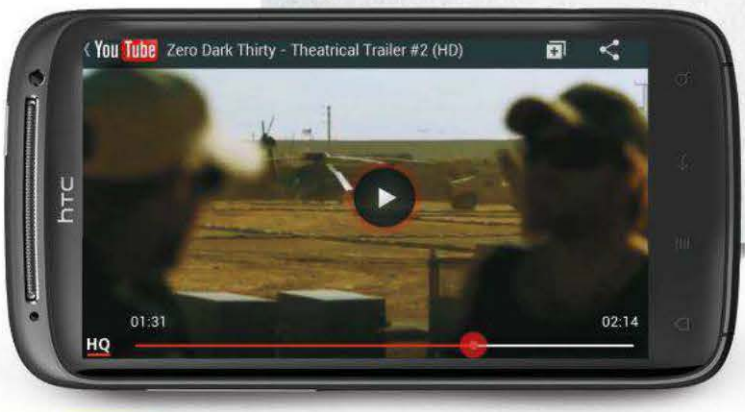
GET THE MOST OUT OF THE YOUTUBE ANDROID APP

There are lots of cool extra settings not many people know about that can make the YouTube experience even better

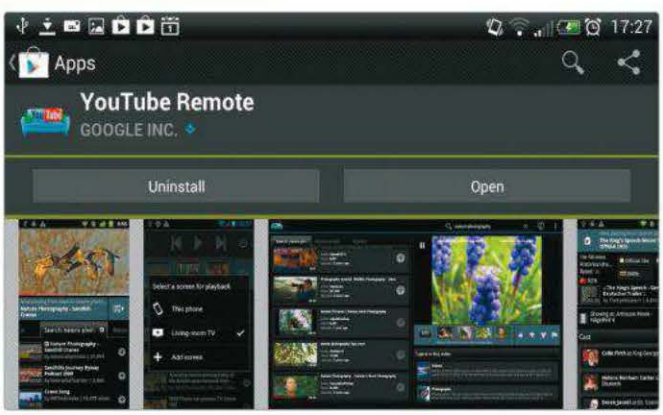
{AT A GLANCE}
SKILL
Straightforward
TIME NEEDED
5 mins
SUITABLE FOR
Android

YouTube has completely revolutionised the way we watch and enjoy videos, and the company has recently invested £94 million in creating original content for its various channels. It's set to overtake television, too, and the convenience of being able to watch any video at any time is a big part of its success.

Thanks to its Google ownership, the YouTube app on Android devices is both slick and intuitive to use, and it's packed with useful features, some of which you may not be aware of. For instance, a new addition is YouTube TV, which turns your device into an interactive remote control. Of course, you can also use it to watch videos on your tablet or phone, and if you have a big device, you can switch it to high definition.

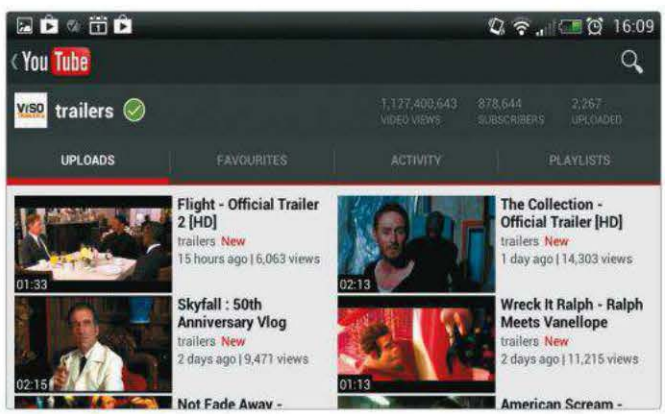


MAKE YOUTUBE EVEN BETTER



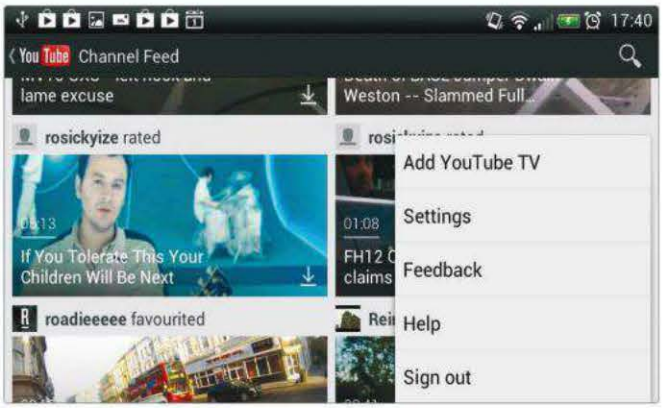
1 On the YouTube

In addition to the YouTube app, which comes pre-installed by default on most Android devices, we need YouTube Remote. Search the Play Store for 'YouTube Remote', then download and install it. Next, open the YouTube App and you should see videos from the channels you're subscribed to.



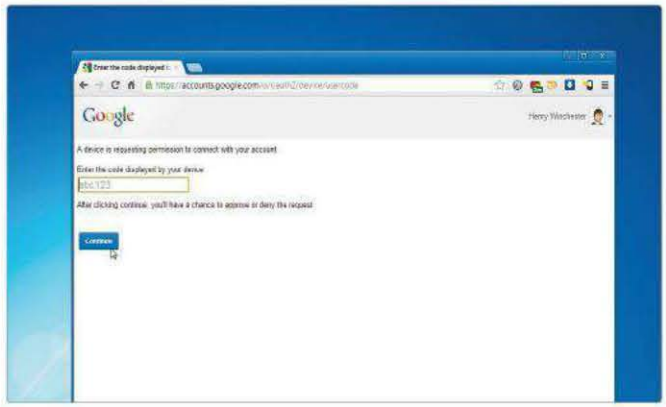
2 Channel surfing

If you haven't subscribed to anything, search for some subjects you're interested in, choose a video and then tap on the channel that uploaded it. You now see all that channel's uploaded videos, and you can tap 'Subscribe' to get new videos in your feed as and when they're uploaded to the site.



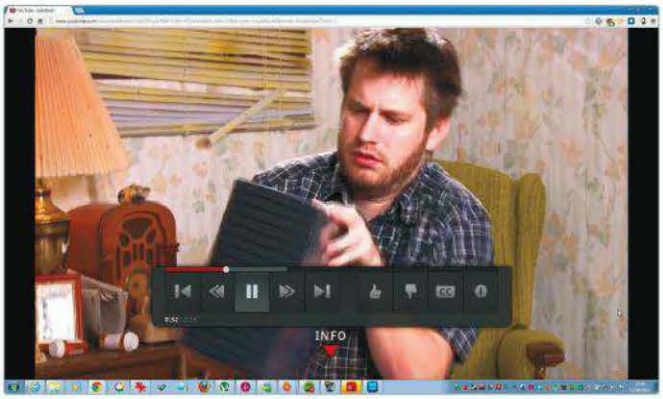
3 Remote control

YouTube TV is a new feature which enables you to use your Android device in conjunction with a compatible television or computer. Tap the 'Menu' icon on your Android device and choose 'Add YouTube TV'. Next, go to your computer or television and type www.youtube.com/leanback into the browser.



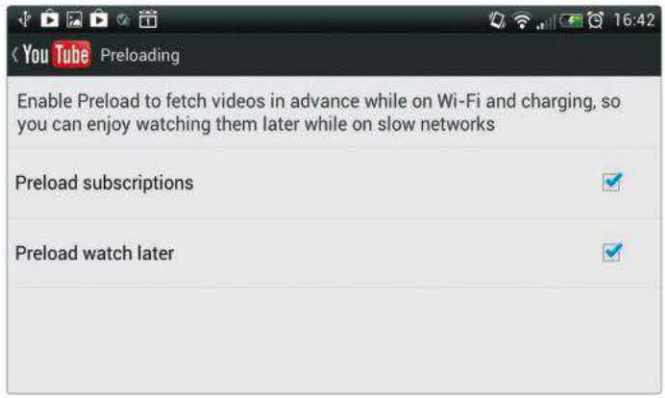
4 TV star

Click on 'My YouTube', then 'Sign in'. Make a note or copy the displayed code, and then enter www.google.com/device in your browser. Enter the code here, then return to www.youtube.com/leanback and choose 'Pair' – you can browse to this using the cursor keys on your keyboard.



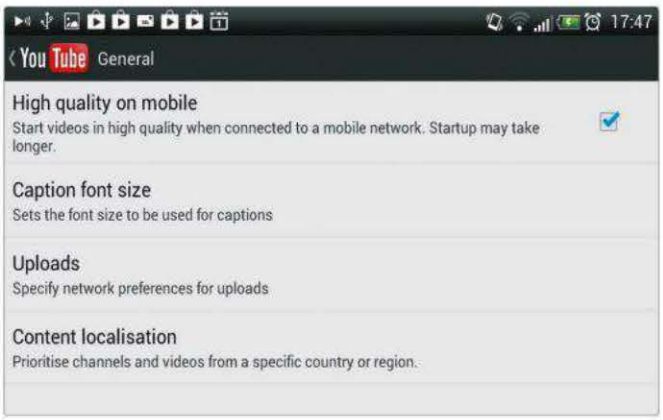
5 Pairing

Now open the YouTube app on your Android device and choose 'YouTube TV' again. Enter the pairing code shown on your television or computer, type a name (for example, 'PC') and then tap 'Add screen'. You can now browse videos on your Android device and then watch them on your computer or television.



6 Preload

Tap the 'Menu' icon on your Android device and choose 'Preloading'. Tick the checkboxes for 'Preload subscriptions' and 'Preload watch later', and YouTube automatically downloads the videos when you're connected to Wi-Fi. This means you can watch videos when you're out and about without having to worry about data costs.



7 Quality viewing

If you're on an unlimited data package and love to watch videos in wonderful high definition, you can choose to turn on high quality by default. Press the 'Menu' icon, then choose 'General'. From here tick the box for 'High quality on mobile'. If you find your videos are taking a long time to load, just turn it off.

8 Up to YouTube

You've now added subscriptions to your YouTube app, set it up with your computer or TV, and enabled preloading. YouTube is a fluid and regularly-updated content source, so make sure you check back frequently, and subscribe to channels that interest you. You'll never be bored on the train again. ■

HOW TO
HACK YOUR LIFE WITH TECH

SECURE YOUR ANDROID PHONE OR TABLET

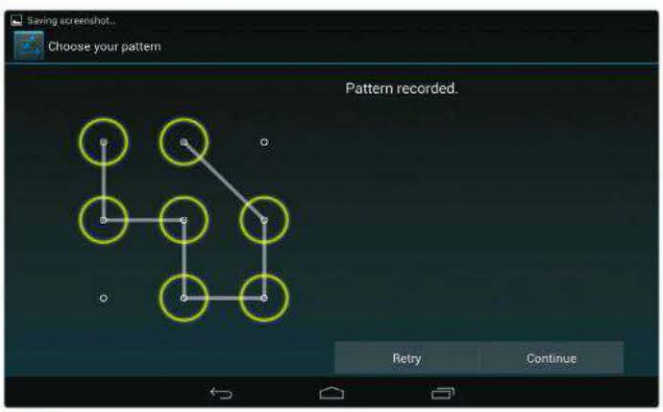
Most people worry that their Android phone will be lost or stolen. Thankfully, there's a number of ways to protect it

{AT A GLANCE}
SKILL
Tricky in parts
TIME NEEDED
20 mins
SUITABLE FOR
All Android devices

Mobile phones have gone from being dumb devices only capable of calls to tiny computers in our pockets, full of photos, music and videos. They're also desirable and worth quite a lot of money, so if they fall into the wrong hands, they can be quickly and easily sold on the black market.

Fortunately, Android devices have a robust security system so that ne'er-do-wells can't use the phone itself. On top of that, there's a number of apps that can locate and protect your phone if it's ever nabbed or lost. In this tutorial we'll show you how to set up the built-in protection on your Android device, and how to install and use a tracking app. The latter is also handy if – like us – you're prone to losing your phone down the back of the sofa...

SECURE YOUR PHONE



1 Basic security

Android devices come with some fairly hefty security measures built-in. To access them, go to 'Security' under the settings. Universal to Android phones is a screen lock system, which prevents access to unauthorised users. 'Pattern' requires you to connect a minimum of four dots on the device's lock screen.

2 Numbers and passwords

'PIN', on the other hand, requires a more conventional four-digit number, while 'Password' requires a word. We recommend the latter option, with a couple of numbers chucked in, because this is harder to work out. Be aware that telltale smudges on the screen can give away simple patterns and PINs.

3 Face unlock

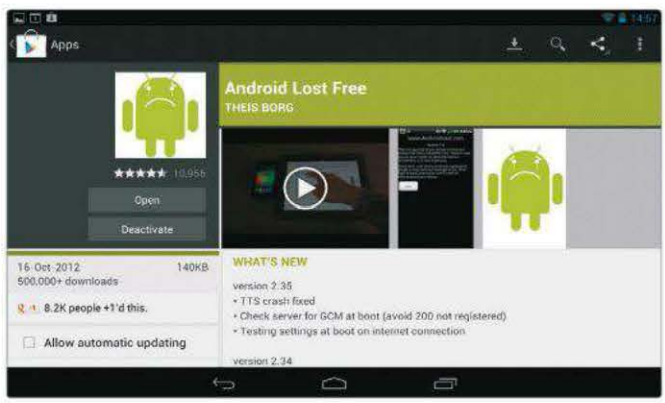
Android 4.0 include face unlock, which uses a front-facing camera to recognise your bonce and unlock the device. Choose 'Face unlock' from the screen unlock options, then tap 'Set it up'. Tap 'Continue', then hold the device at eye level and it will analyse your facial features.

4 Face the facts

You're also asked to enter a PIN or pattern for when face unlock can't detect your visage. Tap 'Improve face matching' and scan your face under different light sources to make it more efficient. You can also enable 'Liveness check', which requires a blink to unlock and makes it even more secure.

5 Owner info

Another handy feature exclusive to Android 4.1 is 'Owner info'. This enables you to type a few personal details to be displayed in the lock screen in case the device is lost. Obviously, typing your mobile phone number here is a bit pointless, but you could add an email address or landline number.



6 AndroidLost

Let's move on to the more important business of tracking your phone down should it be lost or stolen. You'll find lots of Android apps that promise to do this, but AndroidLost is the best we've tried. It's free, but offers a loads functionality while remaining simple to use. Search the Play Store for 'android lost' and tap 'Android Lost'.

7 Get Lost

Download and install the software, then tap 'Open'. AndroidLost automatically connects to your Google account, which also serves as your login for its web page. Tap 'Request administrator rights' followed by 'Activate' if you wish to be able to remotely wipe your smartphone if it's lost or stolen.

8 Secure site

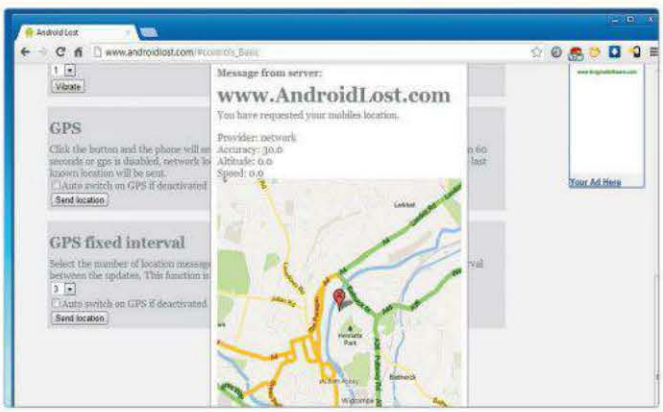
Next, you need to open an internet browser either on your computer or on your Android device, and go to www.androidlost.com. Click 'Sign in' to the upper-right. You may be asked to enter your Google username and password at this point – if so, enter these and then click 'Sign in'.

9 Logged in

You'll see a 'Congratulations' notification, and you'll be logged in. If you've set up more than one device with AndroidLost, you can switch between these using the drop-down menu to the upper-right. Devices are named by their original codenames, so if you're confused, do a quick Google search to confirm which is which.

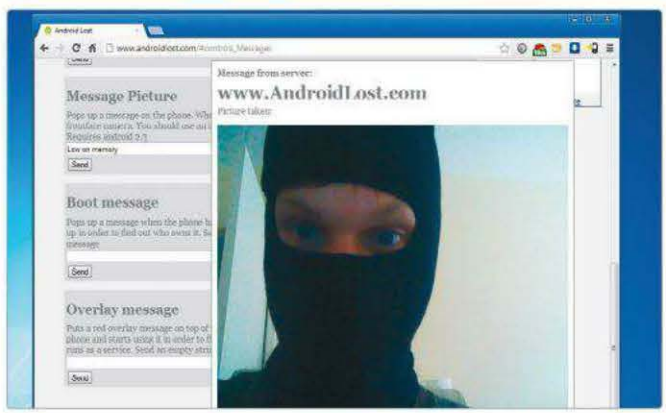
10 In control

This is where AndroidLost gets really cool – you've now got complete control over your smartphone via your web browser. Click on 'Controls' and you'll be able to test this out. First, click on the 'Alarm' button and see what happens. This is handy if you've lost your phone in your own home.



11 Location, location, location

Clicking 'Send location' under the 'GPS' menu pings your phone, retrieves its location and then displays it on a Google Map. If nothing happens here, click on 'Logs' and click the computer icon to the right of any command containing 'GPS'. Click 'View interactive map' to see the precise location on Google Maps.



12 Worst case scenario

Click 'Messages' at the top of the page. 'Message popup' puts a message up on the screen, such as "Please call [your number]". 'Message picture' also sends a message, but covertly takes a photo with the front-facing camera when it's opened – perfect for grabbing a mugshot of the unsuspecting crim.

13 Remote controls

You'll find more commands under 'Mobile'. 'Sound Recording', for instance, records sounds for anything from 10 seconds to an hour. The front and rear cameras can also be activated to take pictures from here. Sounds and images show up in the 'Logs' section of the AndroidLost.com website.

14 Get the message

SMS commands enable you to control your phone via text message, which is useful if it's not connected to a data service. You'll need to authorise a phone to use this feature, so click on 'SMS' and then enter the number of a different mobile phone – a spare or a friend's phone, maybe.

15 SMS signal

Next, open the AndroidLost app on your phone and make sure 'SMS allowed' is checked. Texts from this number control the phone, and you'll find a list of commands on the AndroidLost website. For example, texting 'AndroidLost GPS' returns a text message with the location and status of the phone.

16 Protected

Your Android device is now completely fortified, and in the unfortunate event of it being lost or stolen, you can rest assured that it's protected and you know how to recover it. It's a good idea to set up AndroidLost on all your Android devices – it can protect tablets as well as phones. ■

In detail: Android Lost

HOW TO
HACK YOUR LIFE WITH TECH

HAVE FUN OUTDOORS HUNTING MUNZEES

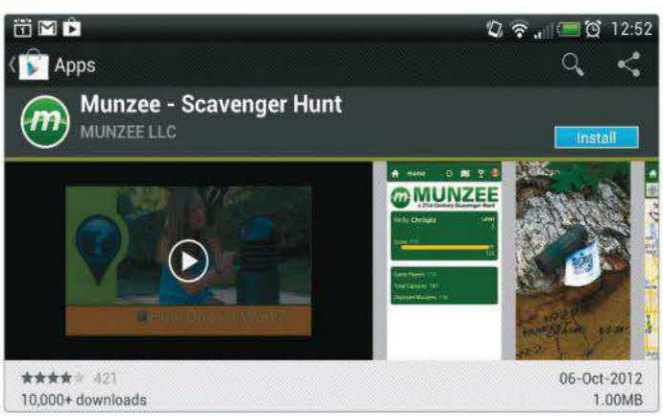
It's great using your Android phone for fun things in the real world, and GPS-powered game Munzee lets you do just that

{AT A GLANCE}
SKILL
Anyone can do it
TIME NEEDED
20 mins
SUITABLE FOR
Android

The process of hunting Munzees – fortunately – doesn't involve chasing small animals. Munzees are, in fact, unique codes that are attached to objects in the real world, and mapped using GPS technology. The Munzee app is used to 'capture' these codes with your Android device's camera, which rewards you with points and places you in the Munzee leaderboards.

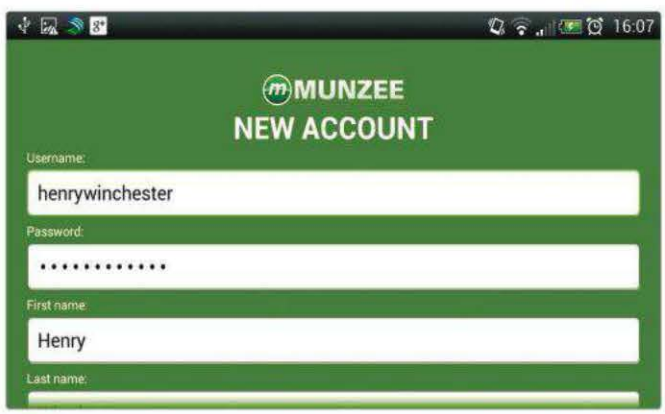
It's great fun, and it will be familiar to anyone who has previously had a go at geocaching, which is a similarly GPS-powered but more fiddly kind of treasure hunt. Kids love it, too, and it's a good way to get some exercise and explore your local area. To get started, you need an Android device with a camera and GPS chip, but the majority usually have these built-in anyway.

HUNT THE MUNZEES



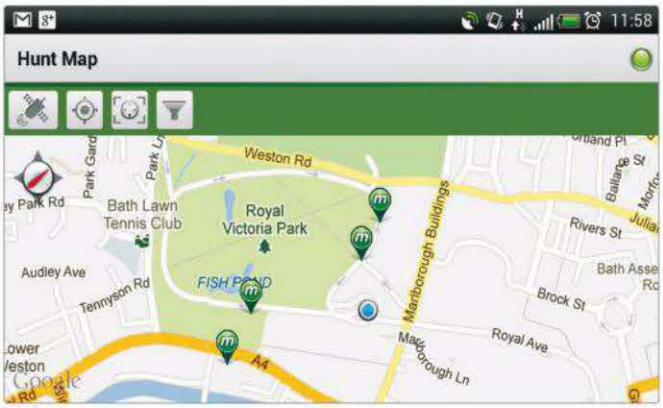
1 We're the Munzees

Munzee can be located on www.munzee.com, but it's easier to use the app instead. Search the Play Store for 'Munzee', then download and install it. Make sure that your device's GPS is enabled by going to its settings, then choosing 'Location' or 'Location & security', and turning on 'GPS satellites'.



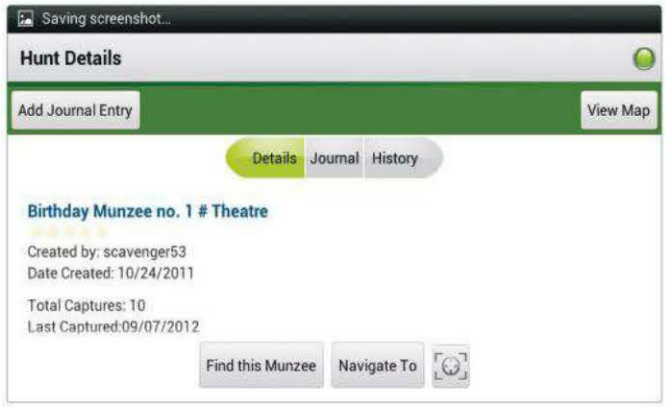
2 Munzee business

Fire up the Munzee app and you're asked for a username and password. Choose 'Sign Up to play Munzee'. Fill in your details, check the box for 'I agree with the Terms of Service...' and then tap 'Create Account'. You're taken back to the login screen – enter the username and password you specified earlier.



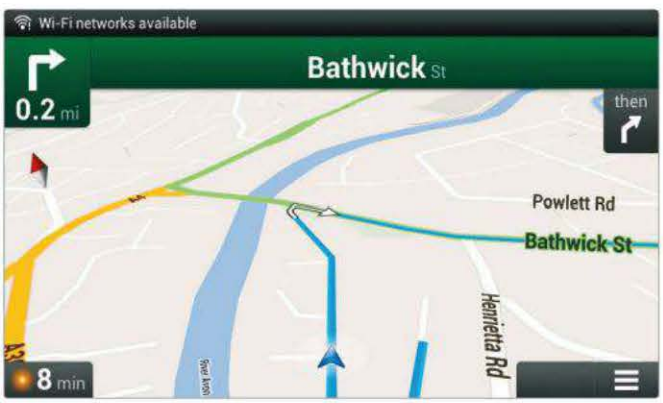
3 See Munzees

Tap 'Hunt' and you can see a big list of all the nearest Munzees, as well as their distance from your current location. Tap 'View Map' and you now see all the Munzees plotted on a Google Map. Zoom in on this by sliding two fingers apart, or by using the controls at the bottom of the screen.



4 Me and my Munzee

Once you've decided on a nearby Munzee, you can tap on the green icon to get more information. You'll find when it was planted, as well as notes from fellow Munzee-ers in its 'Journal', and the number of times it's been discovered in 'History'. It's a good idea to look at the clues under 'Details', too.



5 Munzee bike

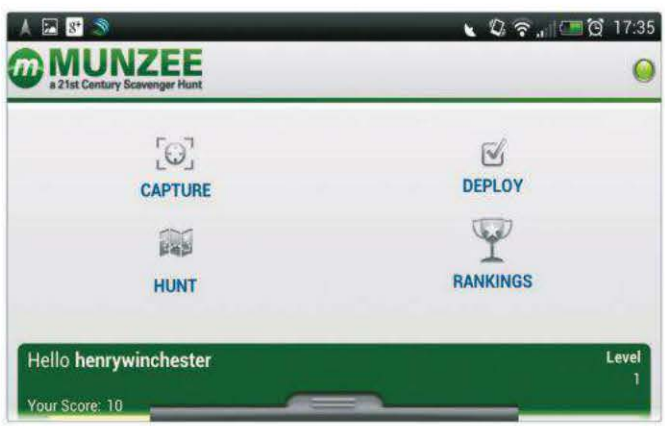
Usually it's fairly easy to find Munzees based on the map, but tapping 'Navigate to' brings up Google Navigation's sat-nav-style directions to the Munzee. Press the 'Menu' icon followed by 'More', then 'Set destination', and use the icon in the upper-right to switch from car directions to walking or cycling.

6 Munzee see, Munzee do

You may have to look around for the Munzee itself – it's either stuck to a piece of street furniture, or hidden in a small capsule. Once you've found it, go to the Munzee app and tap 'Capture'. Position the Munzee's QR code in the square and it registers that you've visited it. From here you can add a journal entry by tapping 'Yes' when prompted.

7 Munzee puzzle tree

If you enjoy finding Munzees, you can even plant your own. Visit www.munzee.com, click 'Create a Munzee', and add a name and description. Click on your account name in the top-right, choose 'Undeployed', then click 'Batch print' to print it. Next, take it to its location, fire up the app and choose 'Deploy' to activate it.



8 Munzee tale

Munzee-ing is a lot of fun, and you've just mastered the basics of this addictive outdoor pursuit. You know how to find Munzees, how to register your visits, and even how to create your own. Remember that there are Munzees everywhere, so turn on your GPS and open the app whenever you go somewhere new. ■

HOW TO
HACK YOUR LIFE WITH TECH

12 ESSENTIAL TIPS FOR LONGER A BATTERY

Yes, you could just turn everything off, but we show your the best power-saving methods that actually work

Battery life is one of the biggest issues facing the Android world today. Take your SIM card out, turn off Wi-Fi and never touch it, and your phone will sit there happily, lasting for a whole week on a single charge. But try to use it for anything 'smart' and that's where your problems start.

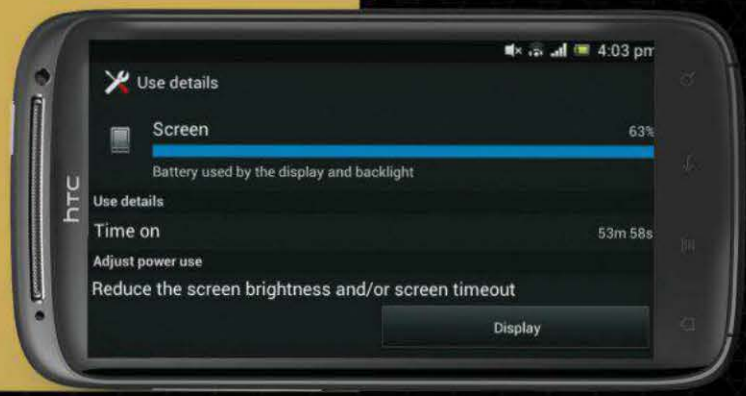
You have to admit that it's a pretty sorry state of affairs when you're counting the uptime of today's smartphones in hours rather than days. The standard metric of decent battery life being whether a phone can last a whole working day on a single charge. So are there any realistic things that you can do to improve the duration of your smartphone's battery life, other than just switching it off, hiding it away in your sock drawer and hoping no one ever calls you?

Read on to discover some easy, not-too-compromising methods of boosting your Android phone's battery life, so you're not always wondering where the nearest power socket is.

It's needless to say, it's not possible to suddenly double your Android smartphone's uptime by magically tweaking a few settings. However, you should be able to squeeze out a few more hours of life from even the puniest of batteries, which could be the different between listening to music on your way home and sitting in silence wondering where it all went wrong.

› Set a rigid bedtime

Some of today's smartphones feature automation tools, which enable you to, say, turn off the mobile signal and Wi-Fi after a certain time. Putting your phone into this sort of induced coma will save power, so if your phone doesn't already support scheduled activities, try installing a management app such as Tasker, and turn off all non-essential stuff overnight. Or stick it in airplane mode yourself. You'll sleep better, too.



Deactivate Wi-Fi when not needed

If your phone's constantly sniffing out and trying to connect to every Wi-Fi signal in the area like a robot dog on heat, you're wasting battery power. Switch off Wi-Fi when out and about or when you know you're not going to be needing it. A homescreen toggle makes this easy. Think of it as something boring but essential you have to do, like always putting your seat belt on.

Upload and sync only on Wi-Fi

If you're a keen Dropbox user or rely heavily on music syncing services, you'll benefit greatly from only doing your uploading through Wi-Fi. It's vastly quicker, which means your phone isn't working so hard on demanding tasks and a lot less strain on those battered old lithium reserves.

Uninstall unnecessary apps

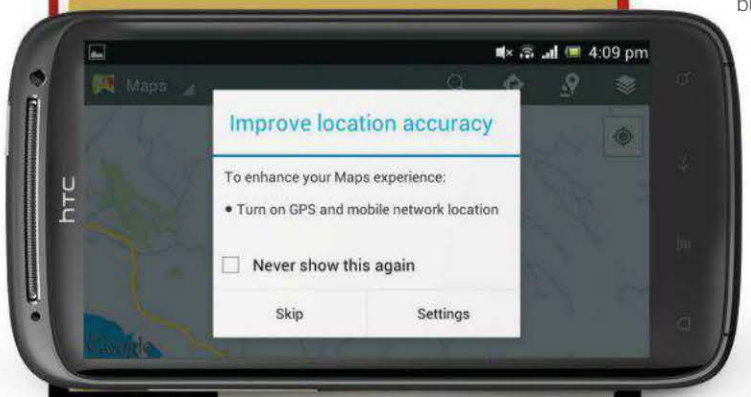
You can never be too sure what's running itself in the background, what with all the multi-tasking, self-uploading, auto-replicating features in today's modern Android apps. So at least minimise the chances of something randomly hoovering up all your battery by constantly trying to connect to some non-existent server, by deleting any unused or old apps.

Use push notifications if possible

Android's built-in email application is great and stylish and everything, but having it poll for messages every 15 minutes isn't best for your battery. If your mail provider offers push notification support use it – the excellent standalone Hotmail app does, for example, which will help lessen power drain a little.

Switch off GPS

Unless you're one of those people who's still using Foursquare to tell the world every time you go out to the corner shop to buy a packet of crisps, there's little reason to have GPS constantly active on your smartphone. Turn it on only when you actually need it, and use the option to have your phone detect your location through the Wi-Fi connection. Wi-Fi location is usually close enough an approximation for most apps. And if they do need GPS, they're clever enough to tell you anyway.



Check yourself

Apps such as Battery Doctor give you a much better indication of what's literally eating away at your smartphone's battery over time than Android's own limited battery life checker, which could help finger something that's the key culprit in draining power. And if you can live without it, bin it.

Install a brightness toggle widget

Set your phone to its minimum possible brightness by default, because it's your display that's by far the biggest user of power. Then stick a big brightness high/low toggle widget on the homescreen, in a place you can find it without being able to see it (such as when using your now ultra-gloomy phone outside). Then only max the brightness when you need to. It might help, and even the automatic brightness option uses a marginal amount of power, because the light sensor needs to sense light.

Dump the widgets

Yes, widgets are a key part of Android, and we're trying to keep this guide practical and not tell you to nuke everything, but do you really need a constantly updating Facebook widget on a homescreen? It's just full of boring people's boring baby photos anyway, and updating widget content puts a constant strain on your battery throughout the day, even if you just activate your phone for a few seconds to check a text message.

Remove haptic feedback

Surely your brain's had enough practice using touch devices that it knows if you've pressed something or not by now? If so, turn off all the haptic feedback options. These little bumps and grinds use power each time you press a key, so try to get used to life without physical feedback.

Put your phone on the windowsill

A strong connection to your phone network requires less power to maintain, so the technical people tell us. So instead of keeping it in your pocket, stick it somewhere and point it in the right direction so you see the maximum number of connection strength bars. Simply flipping your phone 45° on your desk might actually make the battery last longer. What a mind-blowing revelation, eh?

And keep it cool

Batteries work best in cooler temperatures, with prolonged warm periods gradually lowering their efficiency over time. Putting your phone in a looser pocket might help, or perhaps just gently fanning it while it charges. That might not be the best use of your working day, but at least you'll still be able to get on Twitter on the train home. ■

HOW TO
HACK YOUR LIFE WITH TECH

10 BEST ANDROID MUSIC PLAYERS

Pump up the volume with this medley of mobile music apps for Android devices

Describing the standard Android music playing experience is rather difficult, because thanks to the amazing variety of skins and interfaces available, there isn't really one unified way that every Android user plays and manages their tunes.

Yes, Google supplies a barebones music player as part of the standard Android software, but phones with custom user interfaces laid over the top of Google's code, from the likes of Motorola, Sony, HTC and most of the other makers, ignore this in favour of offering their own customised players, completely changing the player's look and feel in the process.

Some, like the music player that comes pre-loaded in HTC's recent models, such as the One X and One S, integrate lyric-finding services, internet streaming radio and more, while Sony's been adding YouTube artist searches and social sharing of track data to its Android models for years. So many phones, all with wildly different MP3 playback options.

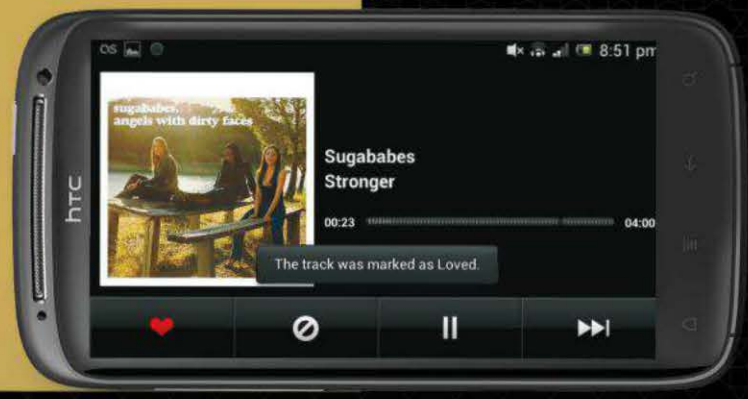
The best way to unify your Android music player experience is therefore to use one of the many standalone apps out there, all of which offer their own take on how to best make your MP3 collection sing out of your phone.

So we've picked 10 of the best ways to get your mobile managing your music today...

› Last.fm

If you have an old account with the famed internet radio site, there's a decent, if rather basic looking, Android music player app to go alongside it. You don't get much in terms of fancy audio playback options, but it gives users access to their previously scrobbled music tracks, meaning you instantly have access to your tunes via your mobile's data link.

Price: Free
Web: http://play.google.com



n7player
A really innovative option for those with a powerful phone, n7player gives you a multi-touch, zoomable music interface, coupled with a modular player screen that's beautifully designed, whether you're using it in portrait or landscape mode. Home widgets and lock screen controls, a tag editor, lyric look-up and much more make this an excellent showcase for Android audiophiles.
Price: £2.29
Web: http://play.google.com

Poweramp Music Player
One of the most popular indie Android music players, thanks to combining a stylish design with stacks of graphic equaliser tools, crossfading, lyric display, Last.fm scrobbling, MP3 tag editing from the phone itself and much more. The trial version's free, but this is one you won't begrudge paying a couple of quid for.
Price: £3.25
Web: http://play.google.com

Winamp
Yes, the old PC desktop player lives on in Android form, with an incredibly feature-packed app for users of Google's mobile OS. Winamp supports iTunes importing, Shoutcast internet radio, plenty of new music discovery tools, which include access to free new stuff, plus lock screen player controls, Last.fm scrobbling and more. It's a brilliantly diverse modern music app which makes it easy to discover a new world of tunes.
Price: Free
Web: http://play.google.com

Cubed
If you want something very different and a little odd, try this. The app, which we think is called Cubed (it's described as [3] on Google Play), presents your music collection on, yes, the surface of a cube. Swiping left to right runs through your collection alphabetically, while paging up and down goes through all your albums. It downloads album art, scrobbles to Last.fm and is generally fun to fiddle with.
Price: Free
Web: http://play.google.com

Amazon MP3
To call this a music player is quite the understatement. As well as playing your legacy MP3 collection, this integrates with Amazon's cloud storage service, enabling you to sync your offline music collection to the cloud for streaming through the app. You have to pay to upload lots of your own tracks, though, with the idea really being to encourage you to buy your MP3s through Amazon – which are free to store and stream through the app.
Price: Free
Web: http://play.google.com

MixZing
A mixed option this. A minimalist and modern front end takes you through to a pretty bland player, but the killer feature here is a customisable graphic equaliser, with the option to apply its audio filters to all your tunes, one particular album or even one individual track. Things don't get much more customisable than that.
Price: Free
Web: http://play.google.com

DoubleTwist Player
DoubleTwist is one of the most comprehensive Android music apps available, fitting in pretty much all you might ever need. It syncs with PC, Mac and even iTunes playlists, manages podcast subscriptions, looks up missing album artwork and more. Some of it's free while other modules are unlocked via in-app purchases, but at least that means you get to give it a shot for free.
Price: Free
Web: http://play.google.com

Holo Music Player
The idea behind this is to bring the Holo Android 4.0 visual style to all Android models, also offering loads of swipe-activated control features. In terms of music playing innovations, there aren't many, but you do get some smart homescreen widgets and lock screen controls. Plus it could convince someone you've got Android 4.0 on your old T-Mobile Pulse.
Price: Free
Web: http://play.google.com

PlayerPro
A properly hardcore option. PlayerPro incorporates a very sexy graphic equaliser, enables you to browse your tunes using a classic folder view, is completely skinnable if you don't like the default look of it and even lets you edit the tags of your audio files, should you like to while away long journeys obsessively naming MP3s files using the same structure. It also supports automatic album art downloads, to help jazz things up a little. ■
Price: £3.20
Web: http://play.google.com

HOW TO
HACK YOUR LIFE WITH TECH

10 BEST ANDROID MOVIE PLAYERS

Play your movies and enjoy a hassle free experience with our picks of the best players and apps for your Android smartphone or tablet

Movie playback is one area where Google hasn't really done much on Android. Its standard video player is still a defiantly dull grey and lifeless experience, with the software maker clearly much keener on pushing its online sales and rental channels on Google Play, rather than encouraging users to fill their mobiles with their own movie files.

That said, a decent Android model, and even older phones such as Samsung's excellent Galaxy SII, have more than enough power to run today's HD video content, although manufacturer politics can play a part in unfairly restricting video playback. Some mobiles only officially allow their users to play MP4 files, for example, as if they somehow convey more legitimate forms of media than the other movie formats available.

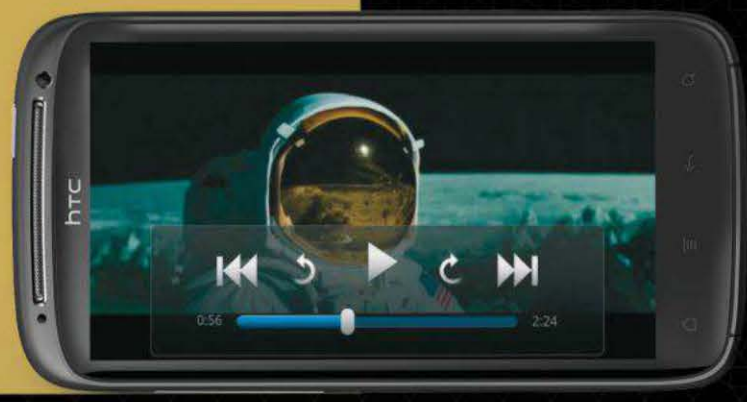
Plus, when it comes to video playback, the dread and often overstated Android fragmentation situation really is a big issue. But it's a hardware problem in the most part. The huge variety in Android chip suppliers out there, from old handsets with single-core ARMv6 chips up to 2012's quad-core monsters, means that some phones won't work very well as media players no matter what app you use.

Put simply, if your phone is still an HTC Wildfire, none of the apps here will get HD MKV files running smoothly on your phone.

But, if you do have something relatively modern with a fast processor, the following media apps ought to spice up Google's rather boring movie playback options, and at least widen your options when it comes to video viewing.

> RealPlayer

This dinosaur from yesteryear has seen a resurgence on Android. While it doesn't offer much in terms of flashy features or enhanced video codec support, it's a well designed media manager that supports music and video in one app. If you just want one thing to handle all your stuff, it'll save you some memory space and it's extremely easy to use.



MoboPlayer

A comprehensive list of supported codecs makes MoboPlayer a good choice, although being entirely software based means you'll need something with some serious processor power to watch anything approaching HD resolution. Still, for getting subtitled MKVs and more exotic movie file types running on Android models that don't officially support them, it's a decent, simple and free choice.

VLC for Android Beta

Desktop video player VLC is a bit of a latecomer to Android, with its official mobile player still featuring a beta tag, limited Android hardware support and a list of caveats as long as the queue outside any given Apple Store once a year. However, it's free, plays most media types through a home network, lets you adjust aspect ratios, and much more. It'll be great, when it's really finished.

DicePlayer

Another more serious option for the hardcore video nerd, DicePlayer features hardware accelerated video playback along with network streaming for easy access to your vast media collection. As with all hardware dependent players, results will vary according to device, but if it plays nicely with yours you should get AVI, MOV, MKV, FLV support and more, plus there's a clever pop-out player that can sit atop your homescreen.

mVideoPlayer

This one's more of a lifestyle choice for those after a fancier interface, as it doesn't include alternative file or codec support. What you do get, though, is a very customisable player, with playlists, bookmarking, poster and movie background info downloads for the stuff you're watching, plus a fantastic design.

VPlayer

The big selling point for VPlayer is its integration of hardware playback acceleration, bringing enhanced file format support – including HD MKVs and AVIs – plus 1080p decoding to some of the more powerful Android phones out there today. It also handles the hard stuff such as the inclusion of subtitle files, for watching those Scandinavian arthouse thrillers.

RockPlayer

Another player option that gives you the option of hardware or software decoding, for getting the most out of your phone's power – or coping with the lack of it. If you need a simple tool to play AVIs on an older handset, it does the job, plus it's able to read stuff stored as ripped ISO images, should that be how you store your old media.

VitalPlayer

Another well received hardware or software based player, VitalPlayer offers comprehensive codec support inside a shell that'll even run on older and slower ARMv6 devices, making it one of the most usable options for bringing wider compatibility to ancient Android models. Plus there is a load of visual customisation options, if you like making the fonts look wrong.

ArcMedia Pro

A small, simple way to add additional codec support and network streaming options to your Android hardware, ArcMedia supports all your usual internet file formats, like AVI, MKV, MP4, FLV and more, along with subtitle abilities and playlists. It's free and only 3.5MB to download, as the developer provides separate versions for tablets and the alternate ARM chipsets.

MX Player

Claims to "play everything" on its Google Play artwork, and with over 10,000,000 downloads, it's the most popular option out there. MX Player's big selling point is hardware support that's augmented by multi-core decoding, so if you're running a modern dual-core processor, you ought to see a significant performance boost. The app also has a Kid's Lock plug-in, so you can leave a child in possession of your Android tablet without having to worry about them tweeting on your behalf. ■

50 Jelly Bean tips

Discover how to make the most of your Android device with this essential selection of hints and tricks

Jelly Bean may not be the game-changer that was Ice Cream Sandwich, but it still brings a lot of new features and functionality to the Android operating system. Many of these are improvements to the smoothness of rendering on the device – it even briefly boosts the CPU when the screen's turned on to make things super slick and speedy. Google dubs these little performance and software improvements as Project Butter, presumably referring to some nice spreadable Lurpak rather than a solidified hunk of congealed milk.

There are plenty of options that people who are hungry for quick improvements to the overall experience can take advantage of. Take a handful of these tips and you can improve your daily interaction with your device and even save yourself time. Make use of all 50, and you'll be crowned King of Android and given your own coronation.

As ever, these tips are based on the vanilla installation of Android, so your mileage may vary depending on how many layers of extra features have been added by your phone or tablet's manufacturer.

1. Talk to Google Now

Google Now includes Siri-like functionality, supplying spoken answers to your inane questions. Try things such as, "What time is it in Kuala Lumpur?", "When's Tom Cruise's birthday – I want to send him a card?", "How do I get home?" or "Will it be sunny tomorrow?" and Now speaks the answer back at you or searches the web for relevant pages.

2. Get more Google Now cards

Google Now presents relevant information such as weather and places on cards. To begin with it may be a little sparse, but searching the web from any device gives you more. Just make sure your web history is enabled; visit http://history.google.com, hit the settings cog and ensure that Web History is on and not paused. Next, search Google for favourite football teams, planned flights and destinations, and the relevant cards pop up automatically.

Searching the web gives you more Google Now cards

The Notification Shade can be expanded with ease

If you get fed up with constant notifications, turn them off

Tap the rotation lock to stay in the current orientation

3. Notification Shade

We previously referred to it as the pully-down menu thing, but apparently it's officially called the Notification Shade. Niftily, certain notifications in the shade can be expanded by sliding two fingers outwards on them, giving you an overview of the subject headers in your email inbox, for example. Moving two fingers inwards on a notification neatly contracts them, too.

4 Say "Google" to search

If you're in America, you can open Google Now and say "Google" followed by your query to search the net. If you're not in America, you can trick Android into thinking you are. Open the settings on your device, choose 'Language and input', then switch Google Voice Typing's language from 'Automatic' to 'English (US)'. Next go to Google Now's settings and again change the language to 'English (US)'. You should see 'Search or say Google' in Now's search bar. Faking an American accent is optional.

5. Rotation lock

You're sitting on a plane watching a video in horizontal orientation. Suddenly, the plane banks to the left and – oh no! – the video changes orientation. This worst-case scenario can be avoided by tapping the rotation lock in the Notification Shade, which keeps the screen in its current orientation. Tap it again to unlock.

6. Turn notifications off

Install enough apps and the notification bar at the top of your Android device becomes the digital equivalent of an unending stream of ticker tape. In fact, Airpush is an entire advertising company that makes money in this way. Fortunately, each and every app you install in Jelly Bean has the option to turn this off. Go to its info page under Apps, uncheck the box labelled 'Show notifications' and enjoy your empty notifications bar.

7. Now settings

You can open Now in two ways – either swipe up from the Home icon, or swipe the Lock icon up when the screen is locked. When you first start it, Now runs through the basics of what it does, and even shows you some example cards. In Now's settings, you'll find each card has its own notifications settings, which apply to both the Now homescreen and the Notification Shade. Standard means that new cards are accompanied by a ringtone and vibration, Low priority places them at the bottom of the list without any notification, and Off, well, turns them off altogether.

➜

8. Equalise your music

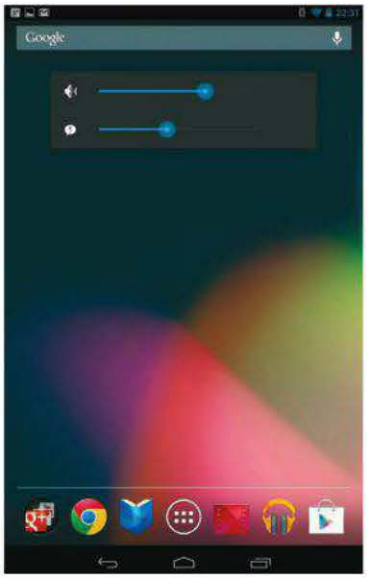
The ability to adjust those all-important bass and treble settings has been sorely missed on Android devices – so much so that a bunch of apps have been made to enable it. It's fixed in Android's stock music player, though. Open a music file in the stock player, hit 'Settings' then choose 'Equaliser'. Here you'll find manual sliders, a load of presets, plus bass and 3D effects. Unfortunately, it doesn't work for the whole device, but it gives your tunes a little more oomph.

9. Fling to remove

Homescreen app clutter (surely the worst of all types of clutter) can be quickly and easily defeated. Simply long-press an icon or widget, then fling it upwards, and it ascends into shortcut heaven. This doesn't uninstall the app itself, though – it still resides in your app drawer.

10. Rearrange your homescreens

Long-press on any icon or widget on your homescreen and you can move it around, and other icons and widgets shift out of the way to fit it in. Bigger widgets can also be resized by long-pressing and releasing them, and then dragging the circles that appear on the edges. It's actually quite fun and satisfying. We just spent three hours doing nothing but this...



11. Owner info

Wait! Put down that blunt rock you were about to use to chisel your contact details into the back of your Android device! Jelly Bean includes the ability to display a few lines of contact details on the lock screen, such as your email address, name and phone number. You need to enable a screen lock from 'Security', then you see the 'Owner info' option appear. This information is mirrored across all Jelly Bean devices, too.

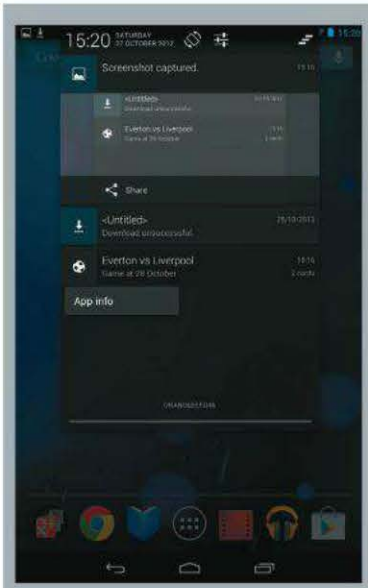
12. Volume controls

You can now set the volume for all the noisiest bits of your Android device individually. Press the volume up or down key and you'll see the familiar little slider with a settings icon to the right of this. Tap this and you'll see separate sliders for media, and notifications and ringtones. Bonus tip: each of these sliders can be, er, slid, with your finger.

Near field communication enables devices to exchange data

The Liveness check ensures a real person is using the device

Send a pre-defined quick response to calendar events



13. Access App info

The all-important App info screen – which enables you to uninstall, stop and disable apps– can be accessed in a new way with Jelly Bean. Pull down the Notification Shade, long-press on an open task and you're taken to the settings page for the relevant app. Handy if you don't know which app displayed the notification.

14. Blink to unlock

While face unlock is smart and quick, more paranoid users may worry that a ne'er-do-well could somehow steal an image of their face – or their actual face – and use it to access the device. Android's Liveness check requires the user to blink before the device is unlocked, preventing access if a quick eye-shut isn't detected.

15. Offline speech-to-text

Being able to dictate long, rambling texts to loved ones is an old Android feature, but it's just got better with an offline mode. Go to 'Google voice typing settings' under 'Language & input' and choose 'Download offline speech recognition.' Now you can dictate that great novel without being distracted by Reddit.

16. Beam it

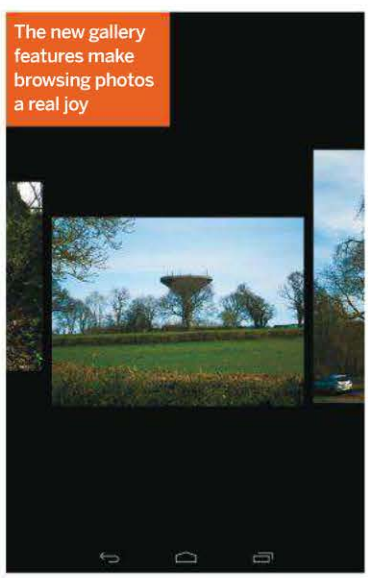
Android Beam works with near-field communication (NFC) to enable fast data exchange between two devices. You need to make sure it's enabled first – it's under 'Wireless & networks'. You also need to know where the NFC area is on your device. This isn't a problem for phones, but it can be just about anywhere on the back of a ludicrously large tablet, so do a quick Google to find out where it is.

17. Simple secure pairing

Simple secure pairing works alongside near-field communication to provide a quick and easy way to connect Bluetooth accessories such as headsets, speakers and keyboards. You don't need to do anything other than activate NFC to use it, but make sure whatever you're pairing with is simple secure pairing-compatible.

18. Calendar notifications

Any events you've been invited to via Google Calendar show up in the Notifications Shade. From here you can expand it and quickly send a pre-defined response (Such as "I'll be there in 10 minutes") or type your own. Quick responses can be edited from within the 'General settings' of the Calendar app itself. Perfect for you social butterflies.



The new gallery features make browsing photos a real joy

19. Talkback

Designed for blind and partially sighted users, Talkback provides an ongoing narration of what's displayed on your device. You can turn it on via Accessibility, then you're taken through a tutorial. It's a very different way of navigating your device, and quite interesting to experience. It also supports Braille input and output devices via USB and Bluetooth.

20. Gallery views

Android snappers will love its new gallery features. Pinch on photos to zoom out into a filmstrip mode, where all your pics are displayed side-by-side. Swipe left and right to browse all your snaps quickly, and slide up and down on individual images to delete them. The gallery then gives you just enough time to realise you've canned the wrong thing and undo your delete.

21. Wi-Fi savings

It's all too easy to run up costs when you're on public or mobile Wi-Fi. Tethering a tablet to a phone can suck a surprising amount of data, and public Wi-Fi, such as that found in hotels, sometimes has ridiculously strict usage policies. In Jelly Bean's 'Data usage settings', you'll find the option to designate certain Wi-Fi networks as mobile hotspots, which stops background apps accessing data, and could save you lots of cash. If there's another Jelly Bean device on the same network, it picks up its mobile hotspot settings, too. ➜

22. Reset app preferences

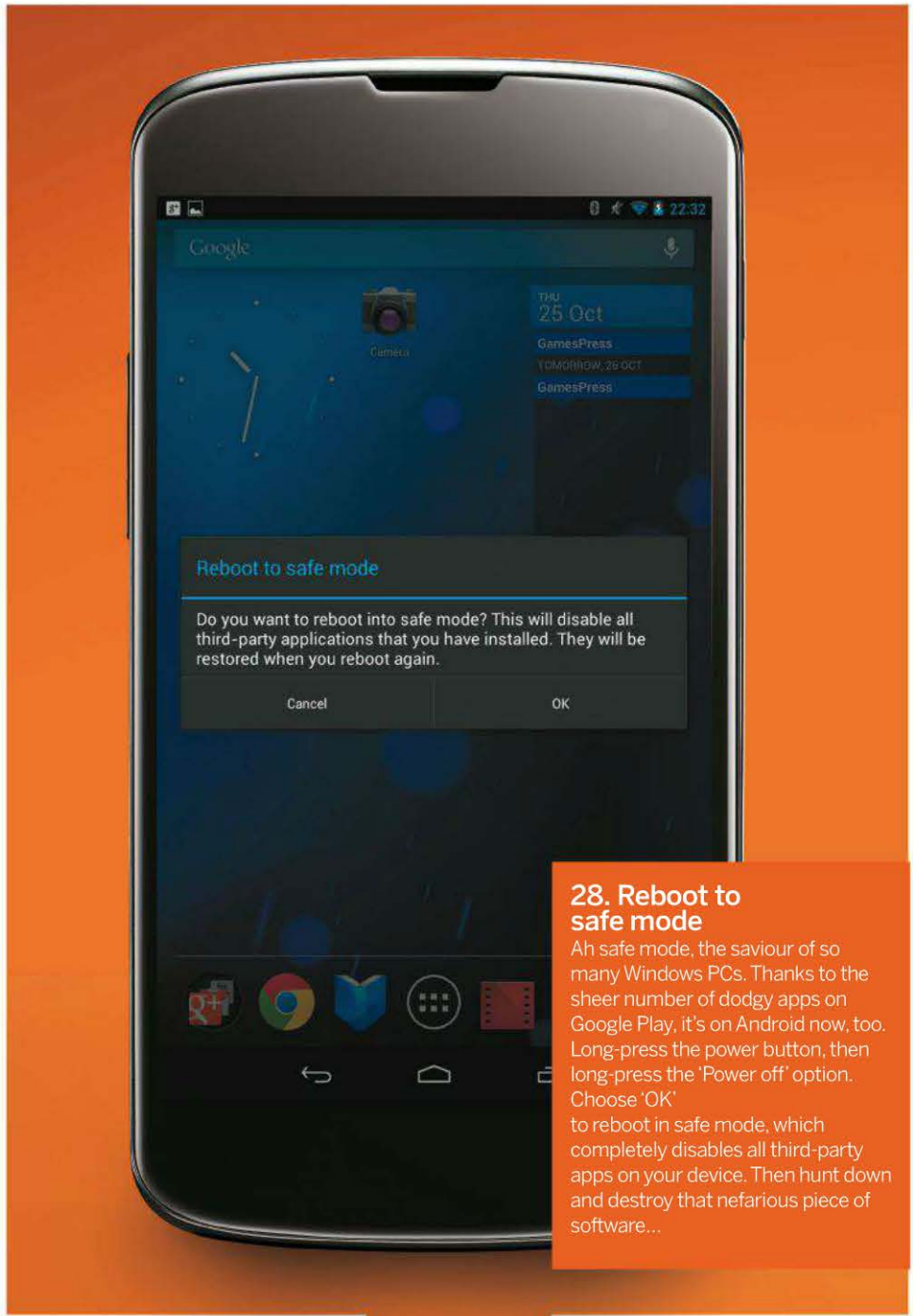
Android gives you loads of different options for each installed app, and on the whole this is a very good thing. Sometimes it can be a bad thing, though – you may find your phone playing up because a crucial app has been disabled, or you've changed the notifications for something important, like emails. In the apps drawer, you'll find 'Reset app preferences' under the settings. This resets all your apps on a global level, returning actions and data settings to their original levels.

23. Try the stock keyboard

The Swiftkey keyboard is enormously popular among Android users, and for good reason – it monitors your typing and grammatical style, and uses this to predict words. Jelly Bean's keyboard now offers the same functionality, using bigram prediction and correction to complete words and sentences. We've found it to be every bit as good as Swiftkey, and even slightly faster and slicker.

24. Add emojis

Emojis are the Japanese version of emoticons, and like most things from Japan, they're much better and cooler than their western counterparts. You can enable emoji support for the default Jelly Bean keyboard by choosing 'Language & input' in the settings app, and then going to the settings for the stock Android keyboard. Here, choose 'Add-on dictionaries' and select 'Emoji for English words'. When you next type certain words (there's a complete list here: http://phandroid.com/2012/08/30/tips-tricks-heres-a-quick-list-of-a-few-jelly-bean-emojis/), you'll see its symbol appear in the predictions bar. It's like Wingdings never died.



28. Reboot to safe mode

Ah safe mode, the saviour of so many Windows PCs. Thanks to the sheer number of dodgy apps on Google Play, it's on Android now, too. Long-press the power button, then long-press the 'Power off' option. Choose 'OK' to reboot in safe mode, which completely disables all third-party apps on your device. Then hunt down and destroy that nefarious piece of software...

25. Sound search

The good news: Google has created its own version of Shazam. Known as What's that Song?, the widget works in much the same way, matching snippets of music to its database and providing you with the artist, track and album. The bad news: due to licensing restrictions it's only available in certain countries, and we don't live in one of them. Keep an eye on your widgets tray when you update, though; Google could well implement it in the future.

26. Add accounts

Android devices – especially tablets – are great for passing around and sharing. But until now, switching between Google accounts has involved wiping the whole device and starting again. Jelly Bean's 'Add account' feature takes pride of place in the settings app, making it easy to add multiple Gmail addresses. There's still no quick way of switching users, but it is a step in the right direction.

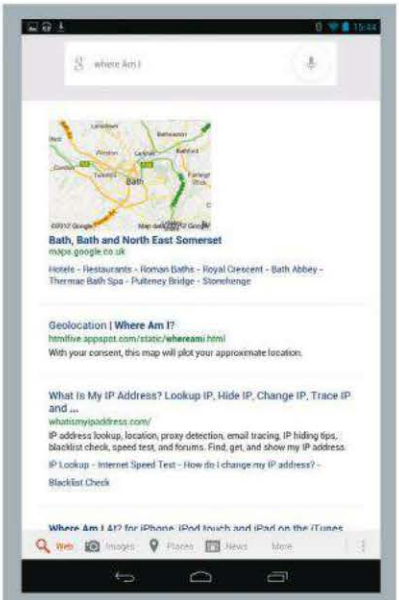
Sharing screenshots with friends is now easier than ever

27. Take and share screenshots

The number of times we've pressed the power button and volume down to take a screenshot is astonishing. It gets even better in Jelly Bean; as soon as you've taken a screenshot, you can expand its notification from the blind and share it from there. Perfect for showing off just how handsome and brilliant Android is to your iOS friends. ➜

29. Android screensaver

Each new incarnation of Android comes with an increasingly elaborate screensaver. Go to your device's About screen and repeatedly tap the 'Android version' tab. You'll be presented with a Jelly Bean with a face – long-press on this and you'll then get a screenful of beans.



30. Voice searches when you're on the go

Plug an Android-compatible headset into your device, then long-press its button and voilà: Google voice search. You'll get spoken results and answers straight into your brain, and it comes in especially useful if you're lost but don't want to stop listening to your banging, disorientating tunes.

31. Device encryption

Paranoid users with sensitive material on their devices love encryption – it basically scrambles all your content so that it can't be read by hackers or thieves. It's been part of Android for a while, but Jelly Bean gets it spot on, even periodically reminding you to encrypt your device. You'll find 'Encryption' under your phone or tablet's security settings.

32. Add quick controls to the browser

One of the options buried beneath the 'Labs' section of Android's web browser is the 'Quick Controls' option. This adds a pop-out menu to the browser, which pulls in a little semi-circular collection of shortcuts to the main browser features, removing the URL bar and giving you more screen to play with. Also, holding down the 'Back' button is the standard Android way of bringing up the bookmarks and history tool, too. But that's been around for years...

33. Long-press to uninstall

Long-pressing on an app within the app drawer enables you to drag it to a homescreen, but it also pops up a couple of menus along the top of the screen. 'App Info' gives you the boring technical stuff about how much memory it's taking up, or you can fling it off the other way to uninstall it.

34. Save your eyes with inverted rendering

Inverted rendering is a posh way of saying it makes the pages black and turns the text white, so it looks as though you're reading the internet from 1997. It also supposedly saves battery, plus is easier on the eyes if you're reading in the dark. It's under the browser's settings tab, within the accessibility area – and there's a contrast slider, too.

35. Set a custom rejection text message

When your Twitter action is rudely interrupted by someone actually telephoning you, there's a polite way to give the caller the boot. Android 4.0 enables users to quickly ping a rejection text message to unwanted callers – and you're able to customise this too. Simply answer a call and then ping the lock screen notification up to access the custom rejection messaging area.

36. Stop app icons automatically appearing

One of the many new Ice Cream Sandwich features is the way Google allows apps to automatically add shortcuts to themselves on your homescreen when they've finished installing. It's useful, but if you're a control freak and wish to remain 100 per cent in charge of your homescreen layout, head to the Google Play apps settings tab and untick the 'Auto-add Shortcuts' toggle.

37. There's a Settings shortcut in the notifications pane

That little settings icon in the ICS notifications area isn't just art to fill the space. It's a shortcut to your phone or tablet's settings area. So use that instead of giving it a homescreen icon slot all to itself.

38. Manually close apps

Google's lovely new recent apps multitasking menu also enables you to close apps quickly, should you suspect one's gone rogue. A long-press within the Recent Apps listing enables you to visit the app's info page, from where you can easily force close it.

39. Remove the lock screen

It's possible to entirely bin your Android 4.0 lock screen, making the phone instantly turn itself on whenever you press the power button. It's a security nightmare, but if your phone lives entirely on your desk and you demand instant access without any unlocking, head to 'Security > Screen lock' and select 'None'. Then be very careful.

40. Folders in the dock

Android's new love of folder formation makes it dead easy to combine app shortcuts and make folders, simply by dragging one icon on top of another. You can make these groups of apps even easier to access by dragging a folder on to the ICS floating dock, so you can squeeze stacks more content on to each creaking homescreen.

41. Take photos while recording video

The Android 4.0 camera app that arrived with the Galaxy Nexus has one cool little extra feature – the ability to fire off still photos while recording video clips. Simply tapping the screen takes a shot at full resolution, which is saved to the phone's gallery while the video's still happily recording away.

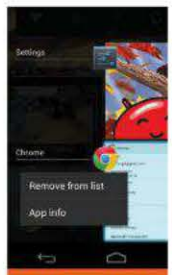
42. Bin animations and transitions

Hidden within the Developer Options section of the Ice Cream Sandwich software are quite a few nerdy ways to adapt your phone. Most won't be of any use to those who are just using their phone as a phone, but if you want it to feel faster, or at least look a little different, the scrolling, zooming effects on windows and menus can be edited in many ways.

43. Take a grab of your phone

Screen grabbing of your phone's display is finally in Android. On the Galaxy Nexus, it's activated through holding the power button and volume down. On HTC's new models it's done by holding the power button and pressing 'Home'. Other phones had different techniques before Ice Cream Sandwich, but it's good to see this now becoming part of the standard Android feature set in Android 4.0.

Give your eyes a break by using inverted rendering



Shut down any app manually via the Recent Apps listing

Now when you're shooting video, you can take some snaps, too

44. Use internet pictures as wallpapers

Found a lovely photograph of some stars, a pretty computer-generated planet or even the mighty Professor Brian Cox himself? Long-pressing on any image in the web browser enables you to instantly set it as your wallpaper, without the hassle of saving it, finding it, and setting it the long way.

45. Long-press dotted words

When typing on the Android 4.0 keyboard, you may see some suggested words appear with the '...' icon beneath. Doing a long-press on this one pops up a much bigger window of suggested words, letting you bail out on some of that tedious typing a little quicker.

46. Add additional faces

The Ice Cream Sandwich face unlock feature, as found in the Galaxy Nexus, enables you to unlock it by scanning your face with the front camera. Which is great, but what if you haven't shaved for the last month? The software can actually store multiple images of your face, so you can do left parting, right parting, shaved, unshaved – or even add a trusted a friend to the visually verified user list.

47. Experiment with GPU settings

Another hidden little gem found within the 'Development options' tab is the hardware acceleration 'Force On' toggle. This makes ICS attempt to boost the performance of any apps that don't already use the feature. It may also break them in the process, though, so it's something of a trial and error fiddling exercise to do on a very rainy day.

48. Type like an adult

Make a stand for grammatical standards in this day and age by long-pressing on the stock Android 4.0 keyboard's full stop button. This brings up such doomed punctuation as commas and speech marks, plus even a semicolon for the extra brave mobile typist.

49. Limit background process

If you fancy an even more serious bit of fiddling, the same ICS developer area contains the option to 'limit background process' demands by the OS. You can use this to stop your phone or tablet storing so many apps in memory. Whether this has any effect on the actual battery life is up for debate, but again, it's something to play with and see whether it suits your phone use patterns.

50. Quickly access Notifications

Here's a simple yet huge change Google's made in Android 4.0 – the Notifications pane can be accessed from the lock screen. Press power, touch the Notifications area, then scroll down to read your latest messages. Obviously it's a bit of a security risk and lets anyone access your messages, so best be careful. ■

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GUIDE TO Android

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